

For Reference

NOT TO BE TAKEN FROM THIS ROOM

For Reference

NOT TO BE TAKEN FROM THIS ROOM

Digitized by the Internet Archive
in 2019 with funding from
University of Alberta Libraries

<https://archive.org/details/Rigby1966>

THE UNIVERSITY OF ALBERTA

RECREATION TRAVEL PATTERNS OF EDMONTONIANS:

A SAMPLE STUDY

by

DOUGLAS WILLIAM RIGBY

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

OF MASTER OF ARTS

DEPARTMENT OF GEOGRAPHY

EDMONTON, ALBERTA

AUGUST, 1966

UNIVERSITY OF ALBERTA

On the FACULTY OF GRADUATE STUDIES

Edmonton residents, an analysis was made of some of the per-
tinent and characteristics of recreation travel on vacation.

The undersigned certify that they have read,
also and recommend to the Faculty of Graduate Studies for
acceptance, a thesis entitled Recreation Travel
Patterns of Edmontonians: A Sample Study, submitted
by Douglas William Rigby in partial fulfilment of
the requirements for the degree of Master of Arts.

ABSTRACT

On the basis of information obtained from a sample of Edmonton residents, an analysis was made of some of the patterns and characteristics of recreation travel on vacation, weekend, and day trips. On vacation trips Edmontonians traveled most frequently to the mountain and coastal areas of British Columbia and the Western United States. On weekend trips they often journeyed to Jasper and Banff or to one of the lake areas within one hundred and fifty miles of the City. On day trips they went to one of the park or recreational areas either within the Metropolitan area or within a fifty mile radius of the City.

When one considers both the relative distance from Edmonton to these destinations as well as their potential attraction, such a configuration of travel seems reasonable. The credibility of such a pattern was corroborated by the respondents' interests and activities on these trips. Sight-seeing and visiting family and friends were of primary interest. Swimming, fishing, camping, picnicking, and golfing were also popular. In view of these activities it was not unexpected that the most common journey was a family trip by car during the summer.

Reviewing the respondents' trips in terms of the time spent and the distance traveled, it was concluded that the greatest demand for outdoor recreation could be designated as an area lying within a maximum radius of one hundred and fifty miles from Edmonton.

ACKNOWLEDGEMENTS

I would like to express my appreciation to my supervisor, Mr. O.F.G. Sitwell, for his assistance and encouragement in this study to pursue and maintain a geographic and scientific approach. I also would like to thank Dr. S.I. Smith for his careful analysis and appraisal of my first draft. Invaluable also was the support and inspiration of Miss Elaine Hereford. Her skillful typing of a most difficult first draft and her constructive suggestions on expression and grammar in the second edition were very much appreciated.

The study would not have been possible without the cooperation of the one hundred and seven Edmontonians who were good enough to complete and return an undoubtedly lengthy questionnaire. Thanks are due as well for the help of various persons in the City and Provincial governments. In addition I would like to thank Miss Barbara Saunders, an excellent travel consultant at the A.M.A. in Edmonton, for her diligence on my behalf.

A special debt of gratitude is owed to Mrs. Wanda Payne whose designing of a computer program facilitated the analysis of the data. Highly valued too was the aid and encouragement of Miss Margaret Savage who participated in the traffic surveys

at Wabamun and Elk Island parks as well as assisted in the coding of the original data. Finally I wish to thank Mrs. Maxine Trahan for her competent typing of the thesis, and Mr. Jack Chesterman for reproducing the maps.

TABLE OF CONTENTS

	Page
ABSTRACT	iii
ACKNOWLEDGEMENTS	v
TABLE OF CONTENTS	vii
LIST OF TABLES	ix
LIST OF FIGURES	xii
CHAPTER	
I. INTRODUCTION	1
Statement of the Problem	4
Outdoor Recreation Resources Within Metro Edmonton	8
Previous Studies in Recreation Travel	18
The Design of the Questionnaire	22
The Selection of a Sample	24
Nature of the Response to the Mailed Questionnaire	25
Summary of Definitions	31
II. SOCIO-ECONOMIC CHARACTERISTICS OF THE RESPONDENTS	33
Age	34
Occupation	38
Relation Between Travel and Occupation	41
III. RESPONDENTS' RECOMMENDATIONS FOR FUTURE PROVINCIAL PARKS	45
Recommendations for New Park Sites	48
Recommendations for Facilities	51

CHAPTER	Page
IV. ANALYSIS OF VACATION TRIPS	54
Destinations	55
Interests or Activities	65
Analysis of Touring Trips	72
Summary	78
V. ANALYSIS OF WEEKEND TRIPS	82
Destinations	84
Interests or Activities	89
VI. ANALYSIS OF DAY TRIPS	94
Destinations	95
Interests or Activities	99
VII. COMPARISON OF DAY, WEEKEND, AND VACATION TRAVEL	103
VIII. SUMMARY AND CONCLUSIONS	117
BIBLIOGRAPHY	121
APPENDIX 1. Questionnaire	128
APPENDIX 2. An Estimate of the Percentage of Private Telephone Lines Per Household in Edmonton	135
APPENDIX 3. Statistical Method for Comparing Socio- Economic and Travel Characteristics of Respondents	137
APPENDIX 4. Classification of Alberta Provincial Parks	139

LIST OF TABLES

TABLE		Page
1-1	Reason for Respondents Not Traveling More as a Percentage of All Reasons Recorded	6
1-2	Frequency Distribution of All Trips by Distance	30
2-1	Summary of Respondents by Age Groups	34
2-2	Summary of Respondents by Sex and Marital Status	34
2-3	Summary of Respondents With Children	37
2-4	Summary of Respondents by Occupation	38
2-5	1961 Census, Edmonton, Occupational Groups	39
2-6	The Relationship Between Recreation Travel and Occupations of Respondents	41
2-7	Summary of Respondents by Estimated Time Spent on Vacation Trips in the Previous Three Years	43
3-1	Summary of Respondents' Length of Residence in Edmonton	46
3-2	Summary of Respondents' Residence Before Living in Edmonton	46
3-3	Summary of Respondents' Recommendations for Future Park Location by Site	47
3-4	Summary of Respondents' Recommendations for Future Park Locations by Distance and Direction	48
3-5	Respondents' Recommendations for Future Park Facilities Indicated as a Percentage of All Facilities Requested	52

TABLE		Page
4-1	Distribution of Vacation Trips by Duration	54
4-2	Summary of the Distribution of Vacation Trips by Destination	56
4-3(A)	Distribution of Vacation Trips by Destination (Trips Abroad)	58
4-3(B)	Distribution of Vacation Trips by Destination (Trips In Canada outside Alberta)	60
4-3(C)	Distribution of Vacation Trips by Destination (Trips In Alberta)	61
4-4	Activities and Interests Indicated as a Percentage Of All Interests Recorded	65
4-5	Mode of Transportation on "Repeated" Vacation Trips	68
4-6	Companions of the Respondent on "Repeated" Vacation Trips	69
4-7	Season of "Repeated" Vacation Trips Indicated as a Percentage of All "Repeated" Vacation Trips	70
4-8	Touring Trips to Vancouver	73
5-1	Distribution of Weekend Trips by Duration	82
5-2	Summary of the Distribution of Weekend Trips by Destination	83
5-3(A)	Distribution of Weekend Trips by Destination (Trips Abroad and Trips in Canada outside Alberta)	86
5-3(B)	Distribution of Weekend Trips by Destination (Trips Within Alberta)	87
5-4	Activities and Interests Indicated as a Percentage Of All Interests Recorded	90

TABLE

Page

5-5	Mode of Transportation on "Repeated" Trips	91
5-6	Companions of Respondent on "Repeated" Trips	91
5-7	Season of "Repeated" Trip Indicated as a Percentage Of All "Repeated" Trips of Two to Six Days Duration	92
6-1	Distribution of Day Trips by Duration	94
6-2	Summary of the Distribution of Day Trips by Destination	95
6-3	Distribution of Day Trips by Destination	97
6-4	Activities and Interests Indicated as a Percentage of All Interests Recorded	99
6-5	Mode of Transportation on "Repeated" Trips	100
6-6	Companions of Respondent on "Repeated" Trips	101
6-7	Season of "Repeated" Day Trip Indicated as a Percentage Of All "Repeated" Day Trips	101
7-1	Summary of Trips by the Number of Trips Per Year	105
7-2	Summary of Trips by the Number of Trip-Days Per Year	107
7-3	Summary of Trips by the Mileage Traveled Per Year	108
7-4	Average Number of Trips per Respondent Per Year	109
7-5	Average Number of Trip-Days on Trips Per Respondent Per Year	110
7-6	Average Total Mileage on Trips Per Respondent Per Year	111
7-7	Summary of Trips Per Year by Mileage from Edmonton to Trip Destination	113

LIST OF FIGURES

FIGURE		following page
1	Vacation Trips by Respondents Outisde Canada	58
2	Vacation Trips by Respondents in Canada outside Alberta	60
3	Vacation Trips by Respondents Within Alberta	61
4	Respondents' Touring Trips to Vancouver	74
5	Respondents' Touring Trips to Seattle	78
6	Weekend Trips by Respondents Outside Alberta	86
7	Weekend Trips by Respondents Within Alberta	87
8	Day Trips by Respondents	98

CHAPTER I

INTRODUCTION

In a M.A. thesis in recreational geography submitted in April, 1965, J.A. Proudfoot reviewed the literature which defined and underlined the importance of recreation and recreational research in geography.¹ It seemed only necessary therefore to draw attention to the literature which distinguished between the terms "recreation" and "leisure" which were used interchangeably in Proudfoot's study. Such usage is not at all uncommon. Indeed, it has been said that in a society such as ours where the value system emphasizes work, the terms free time, leisure, and recreation are often used interchangeably as opposites for work.²

In his book Of Time, Work and Leisure, Sebastian de Grazia has distinguished between these terms. He concluded that although recreation was an attainable goal for a great number of people, the realization of leisure was attainable

¹J.A. Proudfoot, Some Aspects of the Recreational Geography of the North Saskatchewan River Valley - Edmonton. unpublished M.A. thesis, University of Alberta, Edmonton, April, 1965, pp. xii-xvi.

²Sebastian de Grazia, Of Time, Work and Leisure, New York, 1962, pp. 223-224.

by only a few. His conclusion was based in part on the different characteristics which he attributed to each of these terms.

Free time was defined as the residual obtained by subtracting work time, work related time, and subsistence time.³ Free time was freedom from work; it was related to work as one side of a coin is to the other.

The term, recreation, was similarly related to work but it had a more restricted definition than that of free time. Recreation was an

activity that rests men from work, often by giving them a change (distraction, diversion), and restores (recreates) them for work.⁴

³de Grazia further stated that:

"Work time is that spent in work or on the job. ...Work can be taken in its modern sense as effort or exertion done typically to make a living or keep a house.... Work related time [is] that spent in order to appear presentable [at work] or in doing things that one would not ordinarily do were it not for work, like the husband's doing a share of his working wife's housework. ...Subsistence time [includes] activities like eating, sleeping, keeping out of the cold and rain, going to the doctor when ill, all presumably performed to maintain the state of a healthy organism, regardless of whether that organism is put to work or leisure." Loc. cit.

⁴Loc. cit.

Leisure, however, was not the opposite of work according to de Grazia. It was an entity in itself; something on a separate plane from the world of work. Like recreation, leisure was freedom from the necessity to work but this was not related to a time unit; rather it was a state of mind, or an attitude of the one who was at leisure.⁵

Josef Pieper also stated that "leisure is a mental and spiritual attitude." He continued:

Compared with the exclusive ideal of work as activity, leisure implies...an attitude of non-activity, of inward calm, of silence; it means not being "busy," but letting things happen.... [It is] the capacity for steeping oneself in the whole of creation.... Because Wholeness is what man strives for, the power to achieve leisure is one of the fundamental powers of the human soul.... Aristotle says of leisure, "A man will live thus, not to the extent that he is a man, but to the extent that a divine principle dwells within him."⁶

In view of the difficulty, however, in ascertaining in a cross section of the population sampled in the present study whether or not such a state of leisure existed, the present research has confined itself exclusively to the use of the term "recreation."

⁵ Ibid., p. II.

⁶ J. Pieper, Leisure The Basis of Culture, Toronto, 1963, p. 40.

STATEMENT OF THE PROBLEM

The present study deals with recreation travel. More specifically, it is the study of the recreation travel patterns and characteristics of a sample of Edmontonians.

"Where do Edmontonians go on vacation, weekend and day trips?" This was the key question asked in the study. Other questions related to the trip destination, such as the distance and duration of the trip, the mode of transportation, the season of travel, and the activities and interests of the participants were also of interest. On touring trips it was of interest to discover the route taken and the places along the route at which the participants stayed.

The establishment of a geographic pattern in terms of trip destinations may be approached in at least two ways. Firstly, by hypothesizing the key factors which prompt Edmontonians to participate in recreation travel, one may attempt to construct a theoretical distribution. Secondly, one may collect and analyze data on the actual travel destinations of a number of Edmonton people. The first way has been attempted in the following section. The second was discussed in chapters four to six of the thesis.

In a recent article entitled "Recreation Travel: The New Migration," R.I. Wolfe described recreation travel as a

type of migration which had a fixed origin, the respondent's home, but a discretionary destination.⁷ He added:

Ideally, there are no constraints of any kind placed on recreation travel: there are no imperatives imposed from without. But it is the very rare person for whom the ideal is possible: there are almost always constraints.⁸

What are these constraints? In Table 1-1 of the present study the reasons why respondents did not travel more often on recreation trips has been summarized from the answers of a questionnaire mailed to a sample of Edmontonians.⁹ It was apparent that for these people, time and money were the principal constraints in terms of the number of trips.

It was assumed that these two factors also were important in the choice of trip destinations. This assumption was based in part on a comparison with the findings of an Outdoor Recreation Resources Review Commission study entitled "Participation in Outdoor Recreation: Factors Affecting Demand Among American Adults." The study found that

⁷R.I. Wolfe, "Recreation Travel: The New Migration," The Canadian Geographer, Volume X,1, 1966, p. 1.

⁸Loc. cit.

⁹A "respondent" was defined as an Edmontonian who returned a questionnaire. See summary of definition, pp. 31-2.

A copy of the questionnaire used in the study forms Appendix 1.

"Distance traveled increased with income, but only to a moderate extent."¹⁰

TABLE 1-1 Reason for Respondents Not Travelling More as a Percentage Of All Reasons Recorded

Reason	Frequency	Percentage
Lack of time	65	47.4
Lack of money	39	28.5
Too great a distance to desired destination	8	5.8
Poor weather	6	4.4
Because of small children	5	3.7
Others	14	10.2
Total	137	100.0

Source: I.B.M. card data for the first two stated reasons in question four (e) parts B, C, and D of 102 questionnaires.

Also a comparison with the findings of an Alberta Government travel survey showed that the greater the distance traveled to the trip destination, the greater the expenditure of time and money.¹¹ It became apparent in the course of the

¹⁰ Outdoor Recreation Resources Review Commission, Participation in Outdoor Recreation: Factors Affecting Demand Among American Adults, Report No. 20, Washington, 1962, p. 43.

¹¹ Alberta Government Travel Bureau, 1964 Travel Survey, Edmonton, 1965, p. 16.

present research that the relative distance of recreation resources to the respondent's home was a key factor which included the elements of both time and money. It was assumed also that if the distances to several recreation areas were roughly similar, the respondent's assessment of the relative attributes and opportunities of an area would be the deciding factor in the choice of the trip destination.

In his article on recreation travel, Wolfe has clarified the nature of recreation areas by a twofold classification. He has also identified the key to an assessment of their attributes and characteristics. He stated that:

It is necessary...to distinguish between the two broad classes of recreation travel. The one is identified with outdoor recreation of the kind that Marion Clawson has classified as "resource-based": travel to mountains, to the sea, to parks and national forests, to regions of pleasant climate-in sum, to places where nature provides the amenities. The other is identified with cities: travel to places that offer a variety of man-made attractions. Diversity is the key to recreation travel. Multitudes travel to experience something different from what they have experienced before.¹²

In order to assess the potential attraction of Edmonton people to various man-made and natural recreation areas, the following hypotheses were made:

¹²R.I. Wolfe, op. cit., p. 9.

- (1) The greater the distance from Edmonton to a recreation area the less the potential attraction.
- (2) The greater the contrast in the attributes and the opportunities of a recreation area with those of the Edmonton area the greater the potential attraction.

The Edmonton area was defined as an area within one hundred and fifty miles of Edmonton. Major recreation resources were discussed in five areas. The areas were based on distance from Edmonton. Consideration was given in their selection to the definition of the "Edmonton area" as well as to the economically significant provincial and national boundaries. The areas chosen were as follows:

- (1) Within Metropolitan Edmonton.
- (2) Outside Edmonton up to 150 miles from Edmonton.
- (3) More than 150 miles from Edmonton but within Alberta.
- (4) Outside Alberta but within Canada.
- (5) Outside Canada.

Outdoor Recreation Resources Within Metro Edmonton

Edmonton is located on a very level lacustrine plain. Recreationally attractive relief of nearly two hundred feet has been created by the North Saskatchewan River which has incised itself into the plain. Both the main river valley and

several valleys of tributary streams have provided natural sites for many park and recreation areas.¹³ Reference should be made here to the evaluation of outdoor recreation in the North Saskatchewan River valley within Metropolitan Edmonton which is the subject of an M.A. thesis recently submitted to the University of Alberta by J.A. Proudfoot.¹⁴

It was expected that the majority of Edmontonians would participate in recreation activities on day trips within the Metropolitan Edmonton area in part because of the favourable natural and man-made recreation facilities but mainly because of the proximity of these facilities to their homes.

Outside Edmonton up to 150 miles from Edmonton

This area lies within the Albertan plain which stretches from the Missouri Coteau to the foothills of the Rocky Mountains and embraces about two thirds of the area of Alberta as well as the southwestern quarter of Saskatchewan.¹⁵

The underlying "...sedimentary layers of this plain have departed little from their original horizontal position

¹³ D.F. Putnam, Canadian Regions A Geography of Canada, Toronto, 1954, p. 408.

¹⁴ J.A. Proudfoot, op. cit.

¹⁵ D.F. Putnam, op. cit., p. 344.

and thereby impart to the plains the generally flat appearance that is their distinguishing characteristic."¹⁶ Some of the relief in this area owes its existence to the thin veneer of ground moraine or dead ice hummocky moraine deposited during the last glaciation of the area. The lack of relief was considered to be undesirable from a recreational point of view.

There are however a number of lakes in this region, but as is the case with most prairie lakes, those within one hundred and fifty miles of Edmonton are shallow and have muddy shorelines and lake bottoms. Weeds and algae are often a problem. Although the fishing is good in many of these lakes because of periodic stocking, the natural lake conditions handicap boating and swimming. Also an unfavourable water balance during the summer months causes water levels along the shore of many of the lakes to recede.¹⁷ This creates an undesirable beach area of weeds and mud. Importation of sand for the beaches, the killing of weeds by periodic

¹⁶ D.W. Moodie, The St. Alberta Settlement: A Study in Historical Geography, unpublished M.A. thesis, University of Alberta, Edmonton, 1965, p. 4.

¹⁷ A.H. Laycock, Outline, Suggestions and Part of Content Report on "The Evaluation of Lakes in the Edmonton Area for Recreational Purposes", unpublished paper distributed to students in Geography 501, University of Alberta, Edmonton, 1965, p. 3.

applications of bluestone and the extensive development of the hinterland area with recreational facilities by park authorities can only partly offset the lack of natural recreational water resources.

In spite of the lack of favourable topographic and water resources, Edmontonians were expected to be attracted to the lake areas within one hundred and fifty miles from Edmonton on day and weekend trips because of the short distance involved. This conclusion paralleled a similar one reached in an O.R.R.R.C. study report. The O.R.R.R.C. study found that,

...people were unwilling or unable to spend more than two hours in reaching the recreation area which is somewhere within a maximum range of sixty to one hundred and twenty miles under weekend traffic conditions from home to site.¹⁸

More than 150 miles from Edmonton but Within Alberta

In the area of the Albertan plain relief has been created by

...the deeply entrenched rivers in which flow the main tributaries of the Saskatchewan River system. The valleys of the South Saskatchewan and of the Red Deer are from three hundred to four hundred feet deep. Extensive badlands have developed along the Red Deer River, exposing fossil beds in which are found the

¹⁸ O.R.R.R.C. Study Report No. 21, p. 13.

skeletons of dinosaurs and other extinct animals.¹⁹

The additional relief and the presence of dinosaur remains were expected to increase the potential attraction of this area to Edmonton people.

There is also additional potential attraction to be found in the Cypress Hills located in the extreme southeastern part of the Province. The attraction of this area is due to its relief above the surrounding plain and the resulting increased wooded vegetation. The Cypress Hills are a remnant of an earlier erosion surface. The increased distance from Edmonton and the isolation of this area from other recreation resources however, were expected to offset any gain in potential attraction to Edmontonians due to topography and vegetation.

In terms of topography the greatest natural recreation resources in Alberta are found in the Rocky Mountains.

The Rocky Mountains are young, high mountains which were upthrust, probably, during early Tertiary times. The rocks of the region are strongly folded and faulted. ...As mountain ridges rose, a complex pattern of river erosion was etched upon them and further complicated by glaciation. The highest peaks, which are ten to twelve thousand feet in elevation, are snow capped at present but during the glacial period ice action was much greater and all the major valley were filled with ice.

They are, therefore, broad, deep U-shaped valleys instead of narrow V-shaped canyons cut by river erosion.

¹⁹ D.F. Putnam, op. cit., p. 345.

...Small lakes, also are found high up in the mountains, occupying 'cirques' or rocky basins hollowed out by ice. Some of the most marvellous, glaciated mountain scenery in the world is found in Waterton Lakes, Banff and Jasper National Parks.²⁰

The development of a wide range of outdoor recreation facilities and services by the National Park authorities has further enhanced the potential attraction of this area.

To a much lesser extent the foothills of the Rocky Mountains provide a contrast in relief to the plains area of the Edmonton region and therefore also constitute a potential recreational attraction to Edmontonians.

The rocks of the foothills have been much more gently folded but some of the higher ridges exceed an elevation of five thousand feet above sea level. Here there has been no intense mountain glaciation and the crests are rounded, but the valleys of the major streams have all cut to a depth of several hundred feet. The topography thus may be generally characterized as rugged.²¹

Outside Alberta but Within Canada

It was expected that the province of British Columbia, located in the Cordilleran region of Canada, would constitute a greater potential recreational attraction to Edmonton people than the prairie provinces of Saskatchewan and Manitoba. It was assumed that mountain and coastal scenery would

²⁰ Ibid., p. 346.

²¹ Loc. cit.

provide a greater contrast to the Edmonton region. Also the sandy beaches and the clear deep lakes in areas such as the Okanagan Valley were expected to attract Edmonton people in search of favourable boating and swimming areas rarely found in the Edmonton area.

Outdoor recreation resources in Central Canada and the Maritimes were expected to be offset by their relative distance from Edmonton compared to resources in British Columbia.

Outside Canada

Vacation travel to foreign countries was expected to constitute a potential attraction to Edmontonians because of the opportunity it provided to visit areas which have developed under political or cultural environments different from those found in Canada. Although there is a greater contrast to be found in European countries than in the United States, the presumed greater recreational potential of Europe was expected to be offset by the increased distance Edmontonians would be required to travel. As a result it was expected that most vacation travel abroad would be to the United States. It was further expected that Edmontonians would be attracted more to the mountain and coastal scenery of the west coast states of Washington, Oregon and California than to central United States. Again, travel to the Eastern

United States was expected to be handicapped by the relatively greater distance.

In spite of the great distances involved it was expected that a few Edmontonians would be attracted to countries in tropical climates, because of the contrast to the extremely cold winters and none too warm summers of the Edmonton area.²²

It has been already suggested that man-made recreation is associated with cities. A rough estimate of the potential recreational attraction of Edmontonians to several metropolitan areas was attempted by equating the recreational resource of each to their population. Since the distance of the area from Edmonton was considered to be a factor also, the areas were compared in terms of the interaction theory as outlined by J.W. Alexander.²³

The interaction theory is that the strength of the economic connections between two places varies positively according to their size and negatively according to the intervening distance. The larger the populations of the two places, the greater their economic interaction, but

²²Edmonton is classified as a "Dfb" type climate, "Humid Continental Cool Summers." The average January temperature is 7.7° F: the average July temp. 62.9° F., A. Laycock, and R. Common, Lab Manual Physical Geography, Edmonton, 1959, Appendix C.

²³J.W. Alexander, Economic Geography, New Jersey: 1963, p. 624.

the greater the distance between them, the less the interaction.... The interaction theory suggests...that the amount of business will vary directly with the product of the two populations and inversely with the distance between them.

The theory is expressed in the following formula:

$$i = \frac{P_1 P_2}{d}$$

In this equation, i = interaction, P_1 = population of one of the places, P_2 = population of the other place, and d = distance between.²⁴

An index of the potential recreational attraction was estimated for four cities; namely, Calgary, Vancouver, Toronto and Montreal. The 1961 Census metropolitan population figures and mileage figures compiled by the Alberta Motor Association in Edmonton were used in the calculations.²⁵ Since the population of metropolitan Edmonton was a constant in the formula it was represented in the index by the letter "a". The estimated potential recreational attraction index for Calgary was as follows:

$$C_i = a \times \frac{279.062}{187} = 1,492.3a$$

where C_i = index, and a = the constant.

²⁴Loc. cit.

²⁵1961 Census, Population incorporated cities towns and villages, Ottawa, 1962, p. 10-1.

Corresponding indices for Vancouver, Montreal and Toronto were 941.8; 929.3 and 863.9 respectively. On the basis of these figures it would appear that Edmonton people would be much more attracted to Calgary than to Vancouver but that they would be attracted to Vancouver only a little more than to Montreal or Toronto.²⁶ Edmonton itself with a metropolitan population in 1961 of 337,568 was expected to constitute the major area of potential man-made recreation.

Summary

On the basis of distance, on day and weekend trips the majority of Edmontonians were expected to make use of the outdoor recreation areas within Metropolitan Edmonton and within the surrounding area up to a maximum distance of about one hundred and fifty miles. However the attraction of other large cities, of mountain and coastal scenery and of clear deep lakes was expected to draw many Edmontonians beyond this mileage on vacation trips. The recreation resources of the Rocky Mountains and the province of British Columbia were expected to attract Edmontonians in spite of the increased

²⁶ Analysis of the trips taken by a sample of Edmontonians indicated that many more people traveled to Vancouver in comparison with Montreal or Toronto than would have been expected on the basis of these indices.

distances because of the contrast to the natural recreation resources of the Edmonton area. Finally in spite of the long distances involved, a few Edmontonians were expected to be attracted to travel in foreign countries. The majority of these were expected to go to the United States.

In order to ascertain whether Edmontonians in fact behaved in this way, it was necessary to collect data. Various sources were consulted in order to learn if information had already been collected which could be used.

Previous Studies in Recreation Travel

It was found that three studies in recreation travel had been undertaken by the Alberta Government Travel Bureau from 1962 to 1964. The purpose of these studies was to obtain specific information that would aid the development of a long range tourist program.²⁷

In addition, the National parks, several of the frequently visited provincial parks, as well as some of the Metropolitan Edmonton parks had been the focus of continuous

²⁷ Alberta Government Travel Bureau, Travel Survey, Edmonton, 1962-4.

or periodic traffic surveys.²⁸ However, it was found that no research had been undertaken to establish specifically the overall recreation travel patterns of Edmontonians on day, weekend and vacation trips.

Several previous recreation studies were then consulted in order to decide what data should be collected and the method of collection which was to be used. The purpose and scope of three previous studies, undertaken in other provinces in Canada and in the United States, and which more nearly approached the aim of the present study, have been summarized in the following section.

Purpose and Scope of Three Related Studies In Recreation Travel

Toronto Study

The conduct of the study in Metropolitan Toronto was designed to fulfill the following objectives:

To develop and validate a reasonably economical method for the measurement of all travel undertaken by the residents of a given area outside the area in which they reside.

²⁸ Department of Northern Affairs and National Resources, Annual Reports, Ottawa.

Department of Land and Forests, "Alberta Provincial Park Traffic Surveys," Edmonton, 1962.

City of Edmonton Parks and Recreation Department, "Casual Visitor Survey," Edmonton, 1963.

To study in depth the travel habits and expenditures of the residents of Metropolitan Toronto, with a view to providing a base-point for the measurement of changes in the nature and extent of their travel in the future.

To determine the distribution of travel expenditures by Toronto residents among other areas, both inside and outside the Province of Ontario.

To identify a group of Toronto residents whose travel habits and expenditures are completely known over a twelve month period, as a basis for a possible study-in-depth of the psychological, physical, social and economic conditions which may be associated with attitudes toward travel, travel patterns and change in public preferences vis-a-vis the elemental components of travel, i.e., tourist facilities.²⁹

The study was based upon the respondents' maintenance of a diary of household travel for a period of three months. The method was designed to record all travel undertaken by all members of a household at or about the same time each trip was taken. Four separate studies were undertaken over a period of a year. Travelogues were installed in a total of over two thousand households.³⁰

Southern Saskatchewan Study

A public opinion poll on outdoor recreation was designed to obtain a more precise evaluation of a variety of factors which were obviously pertinent to outdoor

²⁹ McDonald Research Ltd., A Study of Travel Habits and Expenditures, Metropolitan Toronto, Toronto, 1965, p. 2.

³⁰ Ibid., p. 4.

recreation planning but about which there was little or no statistical evidence available. It formed an integral and vital component of the preparatory inventorial procedures upon which the subsequent planning of outdoor recreation facilities in the Southern Region has been based.

When the question of the needs and demands of the people of Saskatchewan was raised, a realistic and unbiased solution to the problem could not be immediately obtained. The current pattern of activities was admittedly observable "en masse" but no accurate definition of the scale of the various aspects of the general pattern was available. Moreover, it was felt that significant aspects hidden below the surface or lying beyond the scope of the planner's observations might be present. In addition, there was no definitive understanding of the attitude of the people towards their present recreation activities and the facilities now available. Their desire for the additional facilities was only vaguely appreciated. The questionnaire provided the necessary definition of current outdoor recreation activities and offered a vehicle for the expression of attitudes and ideas.³¹

A random sample of two thousand questionnaires were distributed by mail to people in the southern region of Saskatchewan, and an additional six thousand were distributed by conservation officers in the Southern Region.³²

National Recreation Survey in the United States

The National Recreation Survey was designed

to obtain information about likes and dislikes, and patterns of recreation activities of the population. The

³¹ W.N. Baker, A Report on Outdoor Recreation in Southern Saskatchewan, Department of Natural Resources, Regina, 1958, p. 1.

³² Ibid., p. 2.

questionnaire covered such areas as vacations, recreation trips, outings, use of leisure time, and ownership of equipment.³³

The information collected was used to study differences in rates of participation in outdoor recreation activities among various socio-economic groups, to determine characteristics of recreation activity (distance travelled, amount spent, etc.)³⁴

Information for the survey was sought from a random sample of the civilian non-institutionalized population of twelve years of age and over in the forty-eight co-terminus states. Four separate studies were undertaken in the year between September 1960 and September 1961.³⁵

The Design of the Questionnaire

In view of the methods used in the previous recreation studies, it was decided to collect data on the recreation travel of Edmontonians by means of a questionnaire. (Appendix 1). The format of the final draft of the questionnaire more closely resembled the one used in the Saskatchewan study than the Toronto or O.R.R.R.C. studies.

³³United States Department of Commerce, National Recreation Survey Interviewer's Reference Manual, REC 11-8, Washington, 1960, p. 2.

³⁴Ibid., p. 1.

³⁵Ibid., p. 2.

Questions concerning the socio-economic characteristics of respondents were placed in part A of the questionnaire along with questions dealing with the respondent's recommendations for the location and facilities of new parks within the province of Alberta.

Questions concerning Vacation trips, Weekend trips and Day trips were placed in parts B, C, and D of the questionnaire respectively.

A Vacation trip was defined as a trip of one week or more duration recorded by respondents. Correspondingly, a Weekend trip was a trip of two to six days duration while a Day trip was defined as a trip of a day or part day duration. Attention has been drawn to these definitions by the use of an initial capital letter in these words.

Space was provided in question one of parts B, C, and D of the questionnaire to record the destination, duration and interests or activities of respondents on five specific or five types of Vacation, Weekend and Day trips. Questions two to four required the respondent to delineate and then give details of a specific trip of the type most frequently repeated on Vacation, Weekend and Day travel.

In all cases the inclusion of a trip by a respondent in the questionnaire was accepted as a recreation trip.

However guidance was given to respondents in the type of trips they recorded by including a note at the bottom of the first page of the questionnaire. (Appendix 1) No firm line was drawn between outdoor and indoor recreation on Weekend or Vacation trips. However on Day trips the activities reported by respondent were almost exclusively outdoor recreation.

It perhaps should be noted that the design of the questionnaire was the most difficult part of the research. Several preliminary questionnaires were designed and experimented with. In order to design an adequate questionnaire, it is necessary to know ahead of time where the emphasis is to be placed, what methods are to be used to analyze the data, and what results are expected. Such requirements were not fulfilled in the present study.

The Selection of A Sample

Following the example of the Saskatchewan study, it was decided to mail five hundred questionnaires to a random sample of Edmontonians using the Edmonton telephone directory. It must be admitted that the use of telephone directory introduced a bias into the sample. For example, teenagers and transient people, both of whom rarely had telephones listed in their names, were largely excluded. However, the calculations outlined in Appendix 2 suggested that this method ensured

that over ninety per cent of the households in Metropolitan Edmonton had a chance of receiving a questionnaire.

Nature of the Response to the Mailed Questionnaire

Although a letter of introduction and an addressed stamped envelope was enclosed with each mailed questionnaire, and the Edmonton Journal gave the project a little publicity, the response to the mailed questionnaires was disappointing. By September 1965, only one hundred and two of the five hundred questionnaires had been completed and returned. By November, 1965 an additional five questionnaires were returned. This represented 21.4 per cent of the total number mailed. It was considered that a return of at least eighty per cent would be required in order to preserve the randomness of the sample.³⁶

It is of interest to note Robert Travers' comments about the nature of the response to mailed questionnaires in general:

The central difficulty in all direct-mail techniques is that the percentage of returns is small. A questionnaire of some interest to the recipient may be expected to show only a twenty per cent return even when

³⁶ Pers. comm. Merle Walston, Research Assistant, Division of Educational Research, Dept. of Education, Edmonton, July, 1966.

conditions are favourable....

A considerable amount is now known about who does and who does not respond to mailed questionnaires.... Of particular importance is the fact that those who return them show a marked tendency to have a college education, while those who do not have relatively less education.³⁷

Analysis and presentation of the data

In order to facilitate the analysis of the data, information from one hundred and two questionnaires was coded and punched on I.B.M. cards. A computer program to list the frequency and percentage of each variable coded was designed and carried out.

As a result of the lack of confidence in the randomness of the return of the one hundred and two questionnaires, it was decided to examine closely the socio-economic characteristics of the respondents recorded in part A of the returned questionnaires. Further research was undertaken using the O.R.R.R.C. studies in order to determine what socio-economic characteristics most affect recreation travel. In the following chapter an attempt has been made to analyze the socio-economic characteristics of the respondents from the point of view of those factors most affecting recreation

³⁷ R.M.W. Travers, Introduction to Education Research, New York, 1958, pp. 297-8.

travel. In addition two characteristics of the respondents, age and occupation, have been compared to the population of Metropolitan Edmonton. In this way, an attempt was made to relate the travel patterns of the sample to the population of Metropolitan Edmonton as a whole.

The Calculation of Mileage Scores

In chapters four, five and six of the thesis an analysis of the pattern of recreation travel on Vacation, Weekend and Day trips is described. In these chapters there has been an attempt to focus attention on the trip destination. It was unfortunate that respondents were not asked to estimate their mileage for each of the trips recorded. However, in lieu of this, a method was found to establish the mileage distance to each of the trips in which the destination had been recorded. In this way it was possible to estimate the total mileage for each respondent on Vacation, Weekend and Day trips recorded in the questionnaire. The sum of the total mileage of a given respondent for all trips recorded in the questionnaire was defined as the "total mileage score." The distance traveled to each trip destination was usually estimated by calculating the shortest one way road mileage from Edmonton. This calculation was defined as the "mileage score."

In order to ensure consistency in the calculation of mileage scores, the mileage lists of the Alberta Motor Association in Edmonton were employed.³⁸ Whenever it was necessary to locate a place which was not recorded on the Alberta Motor Association lists, the closest place to the one desired was used and the difference in mileage was calculated using the provincial and the Alberta Motor Association regional road maps.

Where the name of an area rather than a specific place was recorded as the trip destination in the questionnaire, the mileage score was based on the distance to the major town in the area or to the place other respondents often visited. For example if the Okanagan Valley was recorded as the trip destination, the mileage to Kelowna, five hundred and sixty miles from Edmonton, was used as an estimate.

For distances of four thousand miles and over the shortest one way air mileages were used.³⁹

³⁸ These are a compilation of the shortest one way road mileage from Edmonton to selected places in Canada and the United States using provincial road maps for points in Canada and the Alberta Motor Association regional maps for points in the United States.

³⁹ The alternative to estimate comparative road mileages for trips requiring travel by plane or boat was rejected in all but two cases: San Juan, Porto Rico, and Kingston, Jamaica.

In chapter seven of the thesis, a comparison among Vacation, Weekend, and Day trips was undertaken. It should be noted that Vacation, Weekend, and Day trips were recorded over a three, two and one year period respectively. This was done with the view to gaining a more complete picture of Vacation and Weekend travel than was possible if these trips were recorded over a one year period. In order that comparisons could be made among these types of trips however, it was necessary to reduce the number of Vacation and Weekend trips to an annual basis.

Table 1-2 shows the frequency of Vacation, Weekend and Day trips of all respondents. All trips have been defined in terms of a mileage score. They have been distributed in groups which represent distances of from one mile to eight thousand miles from Edmonton. The groups, in which each of the trips were classified, were selected by using a logarithmic scale rather than an arithmetic scale. This was done in order to portray conveniently in the same table Day trips, in which the destinations were very close to Edmonton as well as Vacation trips, in which the destinations were great distances from Edmonton. By reducing the Vacation and Weekend trips to one third and one half respectively in each of the logarithmic mileage groups in Table 1-2, the three types of trips could

be compared on an estimated annual basis without destroying the geographic pattern defined by the destination distances.

TABLE 1-2 Frequency Distribution of All Trips By Distance

Distance from Edmonton in miles	Vaca- tion ^a	Weekend ^b	Day ^c	Weekend ^d	Vaca- tion ^d	Total ^d
7,001-8,000 ^e	1				.3	.3
6,001-7,000						
5,001-6,000	7				2.3	2.3
4,001-5,000						
3,001-4,000	3				1.0	1.0
2,000-3,000	17				5.7	5.7
1,001-2,000	27				9.0	9.0
901-1,000	16	1		.5	5.3	5.8
801-900	40	7		3.5	13.3	16.8
701-800	4				1.3	1.3
601-700	11				3.7	3.7
501-600	22	5		2.5	7.3	9.8
401-500	12	8		4.0	4.0	8.0
301-400	16	34		17.0	5.3	22.3
201-300	28	157	2	78.5	9.3	89.8
101-200	19	231	51	115.5	6.3	172.8
91-100		49	30	24.5		54.5
81-90		4	3	2.0		5.0
71-80	1	37	11	18.5	.3	29.8
61-70	2	89	70	44.5	.7	115.2
51-60	1	17	47	8.5	.3	55.8
41-50	2	61	124	30.5	.7	155.2
31-40			25			25.0
21-30			137			137.0
11-20		1	56	.5		56.5
1-10			449			449.0
Total	229	701	1,005	350.5	76.1	1,431.6

Source: All trips recorded in question one and four (d) of 107 questionnaires.

^aTrips recorded over a three year period.

^bTrips recorded over a two year period.

^cTrips recorded over a one year period.

^dEstimated annual average.

^eCategories based on a logarithmic scale.

Summary of Definitions

A summary of the terms introduced in this chapter and used throughout the study have been listed below as a reference.

Respondents. Edmontonians who returned a questionnaire.

Questionnaire. "Edmonton Travel for Pleasure Poll," Appendix 1, The term "travel for pleasure" has been used interchangeably with "recreation travel."

Trips. Recreation trips recorded by respondents on the questionnaire.

Vacation trip. A trip of one week or more duration, recorded by a respondent.

Weekend trip. A trip of two to six days duration, recorded by a respondent.

Day trip. A trip of a day or part day duration, recorded by a respondent.

"Repeated" trip. The most recent trip of the type which the respondent had repeated most often in the previous five years.

Trip destination. The place recorded by respondents which was the farthest distance from Edmonton.

Mileage score. The shortest one way road mileage from Edmonton to the trip destination.

Total mileage score. The sum of a respondent's mileage scores for all trips recorded in the questionnaire.

CHAPTER II

SOCIO-ECONOMIC CHARACTERISTICS OF THE RESPONDENTS

Because of the lack of a sufficient percentage response to the questionnaire, the sample could not be designated as representative of the Edmonton population within the desired confidence limits of plus or minus five per cent on the basis of the original random sample. However, it was found that the sample was partially stratified in terms of certain socio-economic characteristics which most affected recreation travel. Thus although it could not be stated within the desired five per cent confidence level, it was concluded that the major patterns and characteristics recorded by the respondents would likely reflect a similar trend for the population as a whole.

Tables 2-1 to 2-3 summarize the vital statistics recorded in Part A of the questionnaire concerning the respondents' age, sex, marital status, and the number and age of their children. Tables 2-4 to 2-7 provided information on occupation and the time spent on Vacation trips.

TABLE 2-1 Summary of Respondents by Age Groups

Age Group	Frequency	Percentage
Less than 20	1	1.0
20-24	7	6.8
25-34	24	23.6
35-44	32	31.4
45-54	19	18.6
55-64	10	9.8
65 or over	9	8.8
Total	102	100.0

Source: I.B.M. card data for Part A of 102 questionnaires.

TABLE 2-2 Summary of Respondents by Sex and Marital Status

	Frequency	Percentage
Male --95 ^a		
Single	3	2.9
Married	89	87.2
Widower	2	2.0
No reply	1	1.0
Female --7 ^b		
Single	2	2.0
Married	2	2.0
Widowed	3	2.9
Total	102	100.0

Source: I.B.M. card data for Part A of 102 questionnaires.

^aTotal number of male respondents

^bTotal number of female respondents

Table 2-1 shows that the majority of the respondents were between twenty-five and sixty-four years of age. Only one respondent was under twenty. In addition, most of the respondents were married men. (Table 2-2) Because the questionnaires were mailed to the names which were listed in the Edmonton telephone directory, this was inevitable.

By combining a number of the age groups in Table 2-1, it was found that eighty-three per cent of the respondents were between twenty-five and sixty-four years of age. Nearly every respondent was the head of a family. A corresponding statistic from the 1961 Census, indicated that eighty-five per cent of the family heads in the population of Metropolitan Edmonton were between these same ages.¹ Assuming that the proportion of Edmonton family heads in these ages had not changed in 1965, it may be concluded that in terms of age, the respondents resembled the Edmonton population.

In a study of the socio-economic characteristics which influence travel, an Outdoor Recreation Resources Review Commission report stated that the age of the family head seemed to be unrelated to vacation travel except for the youngest

¹ Canada, Bureau of Statistics, Census of Canada, 1961, Catalogue 95-536, "Population and housing characteristics by census tracts, Edmonton," Bulletin CT-21, Ottawa, 1963, p. 39.

age group which was defined as eighteen to twenty-four years, and the oldest group, defined as sixty-five years and over. The O.R.R.R.C. study found that the youngest and the oldest age groups traveled somewhat less than the middle group, that is, the group between twenty-five and sixty-four years of age.²

However, this O.R.R.R.C. study found also, through a multivariate analysis of the socio-economic characteristics of the respondents, that the differences in travel of the youngest and the oldest age groups could be attributed to their relatively low income.³

If it is assumed that the fifteen "no reply" respondents had no children under twenty years of age, then almost thirty per cent of the married or widowed respondents had no children. About two-fifths of the respondents had one or two children. One-third had three or more children.

According to an O.R.R.R.C. study, neither being married or having children represented an obstacle to participation in outdoor recreation. The presence of young children

²Outdoor Recreation Resources Review Commission, Participation in Outdoor Recreation: Factors Affecting Demand Among American Adults, Report No. 20, Washington, 1962, p. 39.

³Ibid., p. 40.

in the household reduced the likelihood of vacation travel only slightly.⁴

TABLE 2-3 Summary of Respondents With Children

Married or Widowed Respondents With	Frequency	Percentage
No children	28 ^a	28.9
1 child	14	14.4
2 children	24 ^b	24.8
3 children	15 ^c	15.4
4 children	10 ^d	10.3
More than 4 children	6 ^e	6.2
Total	97	100.0
Single respondents	5	-

Source: I.B.M. card data for Part A of 102 questionnaires.

^a15 of these were "no reply" respondents

^b11 of these had two or more children under 10 years of age

^c7 of these had two or more children under 10 years of age

^d6 of these had two or more children under 10 years of age

^e4 of these had two or more children under 10 years of age

Note: Data was recorded on I.B.M. cards for two age groups for children. The division between younger and older children was arbitrarily set at nine years of age.

⁴O.R.R.R.C. Study Report No. 20, op. cit., pp. 25 & 41.

TABLE 2-4 Summary of Respondents by Occupation

Occupation	Frequency	Percentage
Professional ^a	17	16.7
Business and Managerial ^b	23	22.6
Clerical ^c	8	7.8
Craftsmen ^d	30	29.4
Labourers ^e	10	9.8
Retired	10	9.8
Housewife	1	1.0
Student	3	2.9
Total	102	100.0

Source: I.B.M. card data for Part A of 102 questionnaires.

^aDoctors, clergymen, engineers, teachers and social workers.

^bAccountants, managers, and salesmen.

^cCashiers, clerks and secretaries.

^dMainly skilled workers: cabinet makers, welders, motor mechanics, etc.

^eMainly unskilled workers: custodians, security guards and truckers, etc.

In Table 2-4 it may be seen that retired respondents comprised ten per cent of the total- a sizeable group, and comparable with the percentages of labourers or people engaged in clerical occupations. Only three students and one housewife were included in the sample. The latter can be explained by the fact that the questionnaire was sent to the name listed in the Edmonton telephone directory. This person was usually the head of the family.

As a group, professional, business, managerial and clerical occupations represented fifty-five per cent of the respondents who were gainfully employed. Craftsmen accounted for thirty-four per cent, labourers, fifteen per cent. (The retired respondents, the one housewife, and the three students were excluded in this analysis.)

TABLE 2-5 1961 Census, Edmonton, Occupational Groups

Occupational Group	Frequency	Percentage
Managerial, professional and technical, clerical, and sales.	52,934	45
Craftsmen, service and recreation, transportation and communication.	56,868	48
Labourers	5,927	5
Primary workers	2,546	2
Total	118,275	100

Source: Canada, D.B.S., Census of Canada, 1961, op. cit., p. 12.

A similar grouping of occupations using the 1961 Census for Metropolitan Edmonton indicated that the professional, managerial, sales and clerical occupations represented about forty-five per cent of the Edmonton labour force. (Table 2-5) Craftsmen, labourers and workers in the primary occupations accounted for forty-eight, five, and two per cent respectively

of the Edmonton labour force. If it is assumed that these figures represented a similar division of the labour force in 1965, it may be concluded that the sample did not represent the percentage division of occupations that was indicated for the City as a whole. The sample contained a greater percentage of workers in the professional, managerial, sales and clerical occupations and a correspondingly smaller percentage of people in the the other occupations, than for the city as a whole.

An O.R.R.R.C. study found that "vacation trips are reported much more often by professional people, businessmen and those in clerical and sales occupations than by skilled workers, labourers, service workers and farmers."⁵ In the same study, a multivariate analysis of the socio-economic characteristics associated with recreation travel showed that occupational differences were primarily a reflection of income and eligibility for paid vacations. These two factors were considered to be the two most important determinants of vacation travel.

In view of the higher proportion of professional, managerial, business, and clerical people in the present

⁵O.R.R.R.C. Study Report No. 20, op. cit., p. 40.

study than in the Metropolitan labour force, it was expected that the average amount of travel recorded by respondents would be greater than the average for the population of Metropolitan Edmonton.

TABLE 2-6 The Relationship Between Recreation Travel and Occupation of Respondents

Occupation ^a	Higher Mileage Respondents ^b	Lower Mileage Respondents ^c	Total
Professional, business managerial, & clerical	30 ^d (23.8) ^e	17 (23.2)	47
Craftsmen, and Labourers	14 (20.2)	26 (19.8)	40
Total	44	43	87
Chi-square 7.12 (df. = 1)			

Source: I.B.M. card data for occupations, Part A of 100 questionnaires. Total mileage scores for the same 100 respondents.

^aOccupations within the labour force were grouped following the findings of O.R.R.R.C. Study report.

^bThese were the respondents whose total mileage score for all trips recorded in the questionnaire was above the median case of 2,700 miles, one way.

^cThese were the respondents whose total mileage score was below the median case.

^dThese were the observed frequencies.

^eThese were the expected frequencies on the basis of the marginal totals of the contingency table. See text for further explanation.

Table 2-6 is a contingency table in which the observed and the expected frequencies are compared on the basis of two occupational groups. One hundred respondents were divided into two groups of fifty.⁶ These groups were identified as "higher mileage" respondents and "lower mileage" respondents. A higher mileage respondent was one whose total mileage score for all trips recorded in the questionnaire was above the median case of 2,700 miles, one way. A lower mileage respondent was one whose estimated total mileage score was below the median case.

Table 2-6 indicates that thirty respondents who were in the professional, business, managerial, and clerical occupations traveled more than the median respondent. Only seventeen respondents in these same occupations traveled less than the median respondent. Fourteen craftsmen or labourers traveled more than the median respondent, but twenty-six traveled less.

In order to determine if these differences were significant, the expected frequencies were calculated using the

⁶Only one hundred out of the one hundred and two respondents whose travel and occupation data were recorded on I.B.M. cards were used. The two remaining respondents had not recorded occupation or destination data.

marginal totals of Table 2-6.⁷ These values were then compared to the observed frequencies by applying a test of chi-square. A null hypothesis that there was no difference in the occupational groups between the higher and lower mileage respondents was formulated. A chi-square value of 7.12 with one degree of freedom was found.⁸ Within confidence limits of one per cent, the null hypothesis was rejected. There is a significant association between the two occupational groups and the total mileage score.

TABLE 2-7 Summary of Respondents by Estimated Time Spent On Vacation Trips in the Previous Three Years

Duration in Days ^a	Frequency	Percentage
No trips	22	21.6
7-13	9	8.8
14-20	9	8.8
21-30	16	15.7
31-60	35	34.3
61-150	10	9.8
More than 150	1	1.0
Total	102	100.0

Source: I.B.M. card data for question one Part B of 102 questionnaires.

^aEstimates based on the total duration of trips recorded in the previous three years.

⁷The method used is outlined in Appendix 3.

⁸Loc. cit.

Table 2-7 indicates that one-half of the respondents spent from one to three weeks per year on vacation trips. Another eleven per cent spent more than three weeks per year.

On the basis of the previous conclusions drawn from an analysis of the occupations of the respondents, it is likely that the percentage of Metropolitan Edmonton families taking no vacation trip in the previous three years, would be considerably greater than the twenty-two per cent.

Summary

In terms of age groups which travel most, that is, between twenty-five and sixty-four years of age, the sample of respondents in the present study resembled the Metropolitan Edmonton population. It was found also that respondents in professional, business, managerial, and clerical occupations traveled significantly more than those in skilled or labouring jobs. The proportion of respondents in the former occupational group was higher than for the Metropolitan population. It was expected therefore, that the average amount of travel recorded by respondents would be greater than the average for the population of Edmonton.

CHAPTER III

RESPONDENTS' RECOMMENDATIONS FOR FUTURE PROVINCIAL PARKS

This chapter summarizes the respondents' recommendations, recorded in Part A of the questionnaire, for the location of and the facilities for new provincial parks in Alberta.

Tables 3-1 and 3-2 summarize the respondents' length of residence in Edmonton and the place of residence before coming to live in Edmonton. This was done in order to measure the probable range of the respondents' knowledge concerning the park and recreation facilities of parks developed in other provinces, states, and countries. As shown in Tables 3-3 and 3-4, the majority of the respondents recommended that new parks be located within one hundred and fifty miles of Edmonton and near a lake or river. Recommendations for facilities centred around the activities of camping, picnicking, and water related activities.

Table 3-1 indicates that the majority of respondents had lived in Edmonton for at least five years. Their recording of destinations on Day, Weekend, and Vacation trips, discussed in chapters four to six, showed that most respondents were familiar with park and recreation areas in Edmonton, in the rest of Alberta, in British Columbia, and in the North-western United States.

TABLE 3-1 Summary of Respondents' Length of Residence in
Edmonton

Length of Residence in Years	Frequency	Percentage
1 to 3 ^a	6	5.9
4 to 5	10	9.8
More than 5 ^b	86	84.3
Total	102	100.0

Source: I.B.M. card data for question one Part A of 102 questionnaires.

^aNo respondent had lived in Edmonton for less than one year.

^bSeventeen of the eighty-six respondents had lived in Edmonton all their lives.

TABLE 3-2 Summary of Respondents' Residence Before Living
in Edmonton

Place of Former Residence	Frequency	Percentage
Within Alberta	46	55.5
British Columbia	3	3.6
Saskatchewan	10	12.1
Manitoba	4	4.8
Ontario	6	7.2
Oregon, U.S.A.	1	1.2
Texas, U.S.A.	1	1.2
British Isles	3	3.6
Continental Europe	9	10.8
Total	83	100.0
No reply ^a	19	

Source: I.B.M. card data for question one Part A of 102 questionnaires.

^aSeventeen of the nineteen respondents had lived in Edmonton all their lives.

Table 3-2 shows a respondent's place of residence prior to coming to Edmonton. Just under one-half the respondents had the experience of living in provinces, states, or countries where park and recreation facilities had been differently developed. Both their familiarity with the Alberta area and their previous experience probably influenced their recommendations for future development of provincial parks in Edmonton.

TABLE 3-3 Summary of Respondents' Recommendations For Future Park Location by Site

Site	Frequency	Percentage
Lake or river area	29	60.5
Along a highway	9	18.7
Foothills area ^a	5	10.4
Others ^b	5	10.4
Total	48	100.0

Source: I.B.M. card data for the first two recommended sites in question five Part A of 102 questionnaires.

^aSeveral respondents specifically mentioned the Coal Branch area.

^bTwo respondents of the five recommended the development of a dinosaur museum in the Drumheller area. Three recommended further wilderness park areas to be opened in the foothills.

TABLE 3-4 Summary of Respondents' Recommendations for Future Park Locations by Distance and Direction

Distance and Direction	Frequency	Percentage
Within 50 miles of Edmonton	32	56.1
Southwest -- 5 ^a		
Northwest -- 5		
Northeast -- 2		
Southeast -- 2		
No direction indicated-- 18		
Between 50 and 150 miles from Edmonton	16	28.1
Southwest -- 8		
Northwest -- 1		
Northeast -- 4		
Southeast -- 3		
More than 150 miles from Edmonton	9	15.8
Southwest -- 4		
Northwest -- 4		
Northeast -- 0		
Southeast -- 1		
Total	57	100.0

Source: I.B.M. card data for the first two recommended locations in question five Part A of 102 questionnaires.

^a Summarized from eight directions on I.B.M. punch cards. The frequency rank, according to direction for all distances, was first, southwest; second, northwest; third, northeast; and fourth, southeast.

Recommendations for New Park Sites

More than one-half of the respondents who recommended sites for new provincial parks in Alberta specified a lake or

river area. (Table 3-3) This was consistent with the existing travel patterns of respondents on Day, Weekend, and Vacation trips.¹ The recommendations for facilities for water activities also emphasized the importance of lake or river areas as park sites for family outdoor recreation.² (Table 3-5) Over one-half of the respondents also declared that parks should be developed within fifty miles of Edmonton. Eighty-five per cent suggested a location within 150 miles of Edmonton.³ (Table 3-4)

Almost twenty per cent of the respondents suggested sites for new parks near a highway. (Table 3-3) This underlined the need to integrate new provincial parks into the existing and projected pattern of recreation travel so that the parks may be used as stopovers on touring trips and as

¹ Analysis of Day and Weekend trips in particular showed that if trips to parks with lake or river locations were included, trips to lake or river areas were the respondents favourite destinations within the Province. Furthermore the majority of these were to areas within 150 miles of Edmonton.

² This type of park was classified by the Parks Division of Alberta as class D type 2. See Appendix 4.

³ This is also the area where there is the greatest pressure by Edmontonians to develop shoreline property with private cottages. At many lakes close to Edmonton development by cottages has restricted public access to the concession road right of way of sixty-six feet. See Provincial Parks Division, Edmonton; "Recreation Land Inventory for Parks" C.H. Harvie, Dept. of Lands and Forests, unpub. gov't. paper presented at Federal-Provincial Parks Conference 1964, pp. 1-2.

destinations on shorter trips.⁴

Ten per cent of the respondents pinpointed the foothills as an area to be developed further for outdoor recreation.⁵ Three respondents suggested the creation of wilderness parks in the Coal Branch area.⁶ In addition two specialized types of parks were suggested: one with facilities for skiing and one to be located in the Drumheller area and to include a dinosaur museum.

In Table 3-4 specific suggestions for park locations to lake or river areas, along highways, and in the foothills of Alberta have been summarized in terms of distance and direction. The need for provincial parks within one to three hours driving distance from Edmonton, that is within 150 miles,

⁴ Respondents may have had in mind also the development of highway parks categorized as Class F. See Appendix 4.

⁵ Undoubtedly the early development of the Rocky Mountain National Parks in Alberta has inhibited the development of the foothills area of the province. In view of the increasing pressure on the facilities of the National Parks during the summer months it now may be time to consider further development of the foothills.

⁶ An historic type of park could also be developed in the Coal Branch area based on the development and decline of coal production in the area. Some of the abandoned mining sites and buildings could be preserved.

was strongly expressed.⁷ Within each distance classification the directional preference agrees with the existing pattern of highways and lakes.

Recommendations for facilities in future Provincial parks were oriented toward picnicking and camping. (Table 3-5) The most frequently requested facilities were tables, barbeque pits or fireplaces, drinking water and flush or chemical toilets. Also included in the recommendations were play areas for children and a concession where groceries could be purchased. A great demand was shown also for the

⁷Undoubtedly the large population of such centres as Edmonton and Calgary has created the greatest demand for park facilities in comparison with other provincial residents.

"The great bulk of the demand for outdoor recreation facilities must be satisfied in after work and weekend hours. Americans are a highly mobile people it is true, but cars and highways do not alter the basic pattern. Even on a vacation trip more than half seek recreation one or at the most two days' travel from home. For weekend and day trips they travel only a few hours. This is true even among upper income groups." Outdoor Recreation Review Commission, Outdoor Recreation For America, Washington, 1962, pp. 26-27.

In a spot check at Wabamun Provincial Park on Thursday afternoon July 1, 1965, Dominion Day, it was found that out of a sample of 530 parked automobiles, ninety-three per cent had Edmonton licence plates. In a similar check at Elk Island on Sunday afternoon, July 4, 1965, it was found that out of a total of 610 parked automobiles, eighty per cent, had Edmonton licence plates. Edmonton licences were identified using the distribution of licence plates, 1965, published by the Motor Vehicles Branch, Dept. of Highways, Edmonton. Wabamun Provincial Park and Elk Island National Park are located about forty-five miles west and twenty-eight miles east of Edmonton respectively.

TABLE 3-5 Respondents' Recommendations for Future Park Facilities Indicated as a Percentage of All Facilities Requested

Facilities For		Frequency	Percentage
Picnicking and Camping		103	66.0
Fireplaces	- 16 ^a		
Toilets	- 14		
Drinking water	- 10		
Tables	- 9		
Play area for children	- 7		
Grocery supply centre	- 4		
Kitchen shelter	- 3		
Electricity	- 3		
Trailer parking	- 1		
Camping, general	- 27		
Picnicking, general	- 9		
Water Activities		29	18.6
Swimming	- 17		
Sandy beach	- 5		
Fishing	- 4		
Boating	- 3		
Others		24	15.4
Total		156	100.0

Source: I.B.M. card data for the first three recommended facilities in question five, Part A of 102 questionnaires.

^aNumber of respondents recommending fireplaces (etc.)

creation of suitable swimming and wading areas with sandy beaches.

These recommendations seem to agree with the past Provincial park policy as expressed in the following passage

from C.H. Harvie's address to the Federal-Provincial parks conference in 1964.

Provincial park planning and development in Alberta has aimed at providing family unit recreational opportunities: namely, bathing beaches, camp and picnic areas, play grounds and, where possible, boating and fishing.⁸

The recommendations reflect the existing pattern of recreation travel on Vacation, Weekend and Day trips as well as the interests and activities of the respondents on these trips. In the following chapters these patterns and interests will be discussed.

⁸C.H. Harvie, op. cit., p. 1.

CHAPTER IV

ANALYSIS OF VACATION TRIPS

This chapter summarizes the Vacation trips recorded by respondents over the three year period 1963-1965. Tables 4-1 to 4-4 summarize the duration and destination of the Vacation trips as well as the interests and activities of the respondents on these trips. Tables 4-5 to 4-7 indicate the mode of transportation, the respondent's travel companions, and the season of travel on "repeated" trips. A discussion of the route and the places at which respondents stayed, on touring trips was also included.

TABLE 4-1 Distribution of Vacation Trips by Duration

Duration of Trip in Days	Frequency	Percentage
7 to 13	91	53.5
14 to 20	53	31.2
21 to 29	15	8.8
30 to 60	9	5.3
More than 60	2	1.2
Total	170	100.0

Source: I.B.M. card data for first three recorded trips in Part B of 102 questionnaires

Table 4-1 indicates that the majority of the Vacation trips were less than three weeks long. Over one half were between one and two weeks duration while another thirty per cent were between two and three weeks. Only fifteen per cent were longer than three weeks. W.N. Baker's findings on the length of the vacation of town and city people in Southern Saskatchewan corresponds well with this distribution.¹

Destination on Vacation trips

The distance respondents traveled to destinations on Vacation trips was related to the duration of the trips. Generally, the longer the trip, the farther the distance traveled. Exceptions were Vacation trips to cottages, which were usually within one hundred and fifty miles of Edmonton.

The most frequently traveled distance on Vacation trips ranged from one hundred to one thousand miles, one way. In the median case the destination was about seven hundred miles from Edmonton.²

Alberta Motor Association travel counsellors often advise their customers not to attempt too great a distance on

¹W.N. Baker, A Report on Outdoor Recreation in Southern Saskatchewan, unpublished report, Department of Natural Resources, Regina, 1958, p. 32.

²Figures were based on those shown in Table 1-2, p. 30.

touring trips.³ On a special program of hints on family travel by car, Margaret Pope, a C.B.C. broadcaster, suggested that, in order to allow time for sightseeing and picture taking, one should allow three hours for every hundred miles. Using these figures, travel time to Vancouver and return from Edmonton would require five and one-half days.

TABLE 4-2 Summary of the Distribution of Vacation Trips By Destination

Destination	Frequency	Percentage
Trips abroad	65	36.5
United States	-- 54	
Europe	-- 7	
Caribbean	-- 2	
Mexico	-- 2	
Trips in Canada outside Alberta	76	42.7
British Columbia	-- 49	
Saskatchewan	-- 15	
Manitoba	-- 7	
Eastern Canada	-- 4	
The Northwest Territories	-- 1	
Trips within Alberta	37	20.8
More than 150 miles from Edmonton	-- 28	
Within 150 miles of Edmonton	-- 9	
Total Vacation trips	178	100.0

Source: I.B.M. card data for the first three trips recorded in question one, Part B of 102 questionnaires.

³Pers. comm. Miss. B. Saunders, Alberta Motor Association, Edmonton.

Most of the Vacation trips were to destinations outside the province of Alberta, thirty-seven per cent being to points abroad and forty-three per cent being to Canadian points outside Alberta. (Table 4-2) Trips to destinations within Alberta accounted for approximately one-fifth of the total number of Vacation trips.

This preference for foreign and out-of-province travel is economically of some importance. Money spent on such travel is lost to the Canadian and the Albertan business communities as well as to the Federal and Provincial governments.

Summarized in Table 4-3(A) and Figure 1 are the respondents' Vacation trips abroad. Out of a total of sixty-five, fifty-four were to the United States. Hence the majority of Vacation trips abroad were to destinations in the United States. Furthermore, of the fifty-four trips, forty-five were to Western States. Thus not only were the majority of Vacation trips abroad made to points in the United States, but they were also made to the western part. The most popular city was Seattle.

Only seven trips were recorded to destinations in the Eastern United States, three of these being to Florida. One trip was made to Hawaii and one to Alaska.

Of the sixty-five Vacation trips abroad, a total of

TABLE 4-3(A) Distribution of Vacation Trips by Destination
(Trips Abroad)

Destination		Frequency
Northwestern United States		29
Washington ^a	-- 14	
Oregon	-- 2	
Montana	-- 5	
Idaho	-- 3	
Wyoming ^b	-- 4	
South Dakota	-- 1	
Southwestern United States		16
California ^c	-- 11	
Arizona	-- 4	
Colorado	-- 1	
Northeastern United States		4
Connecticut	-- 1	
Washington, D.C.	-- 2	
Illinois	-- 1	
Southeastern United States		3
Florida	-- 3	
Hawaii		1
Alaska		1
Europe		7
British Isles	-- 4	
Cont. Europe	-- 3	
Mexico		2
Caribbean		2
Total trips abroad		65

Source: I.B.M. card data for the first three trips recorded in question one, Part B of 102 questionnaires.

^aTwelve trips to Seattle.

^bThree trips to Yellowstone National Park.

^cThree trips to San Francisco.

VACATION TRIPS BY RESPONDENTS OUTSIDE CANADA

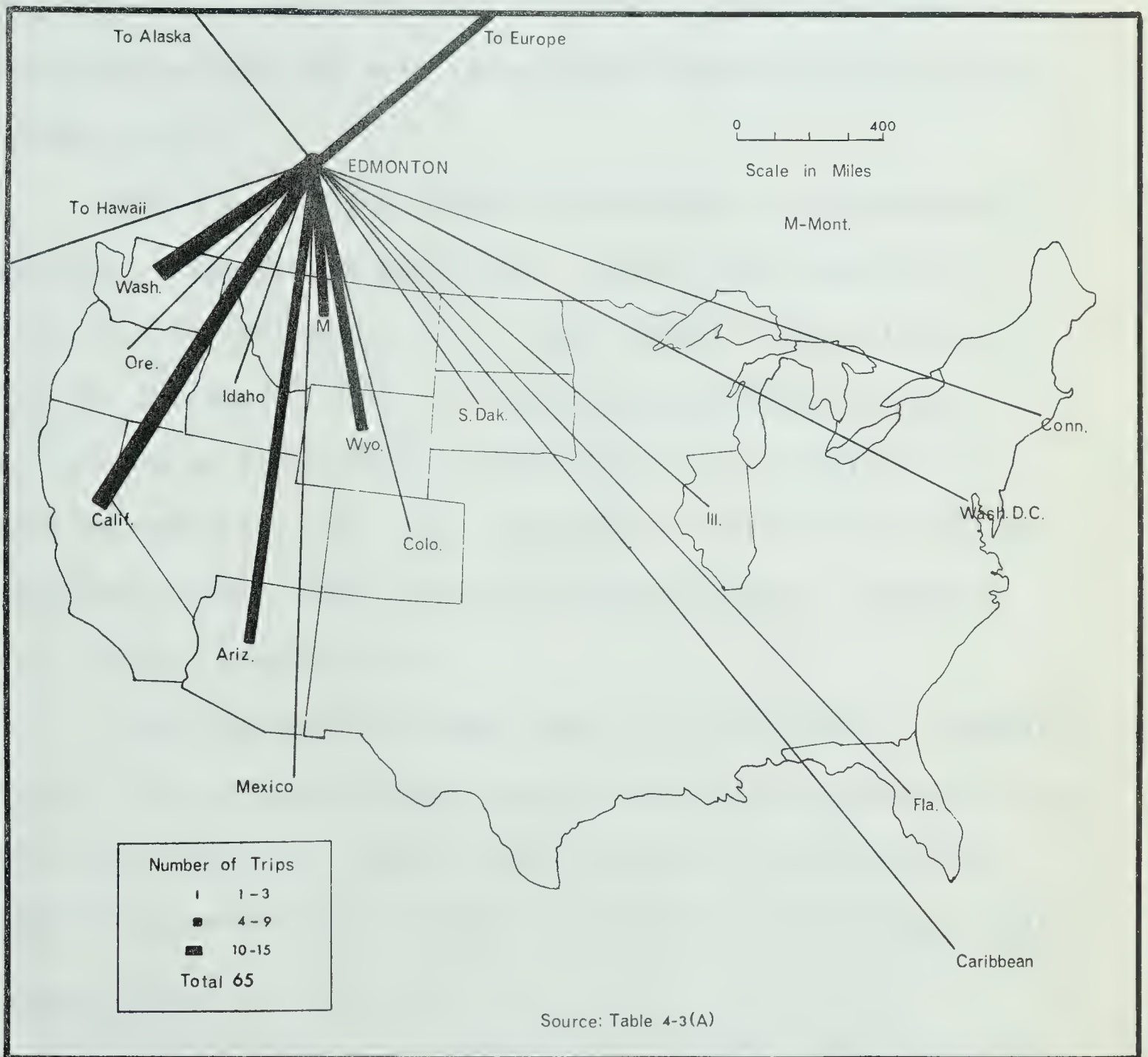


FIGURE 1

eleven were to countries other than the United States. Seven trips were recorded to destinations in Europe and two each to the Caribbean and Mexico. Although small in number, these represent a significant proportion of travel abroad. Their significance resides in their relatively great distance from Edmonton as compared with trips whose destinations were in the United States.

Table 4-3(B) and Figure 2 summarize the respondents' Vacation trips within Canada but outside the province of Alberta. The majority of the trips were to destinations in British Columbia.⁴ Out of a total of seventy-six trips, forty-nine or sixty-five per cent were to destinations in British Columbia. The most frequently visited areas were the British Columbia coast and the Okanagan Valley. Vancouver was the most popular city.

Only fifteen trips were made to the province of Saskatchewan. The Prince Albert area and the city of Saskatoon were the most frequently visited destinations in this province. Seven trips were made to Manitoba, five of these being to the

⁴ On the basis of tallies by the Alberta Motor Association, Barbara Saunders, a travel consultant for the A.M.A. in Edmonton, pinpointed British Columbia and California for summer vacation travel. Trips in the months of March to May, she added, were usually to the East to pick up a new car. Pers. comm. Barbara Saunders, A.M.A., Edmonton.

TABLE 4-3(B) Distribution of Vacation Trips by Destination
(Trips in Canada outside Alberta)

Destination		Frequency
British Columbia		49
Vancouver Is. ^a	-- 9	
Vancouver area ^b	-- 18	
Okanagan Valley	-- 13	
Kootenay Park area	-- 2	
Nelson area	-- 2	
Hudson Hope area	-- 2	
B.C. general ^c	-- 3	
Saskatchewan		15
Saskatoon	-- 5	
Prince Alberta area ^d	-- 5	
Kindersley area	-- 3	
Regina	-- 2	
Manitoba		7
Winnipeg	-- 5	
Manitoba general	-- 2	
Eastern Canada		4
Ontario	-- 2	
Quebec	-- 1	
P.E.I.	-- 1	
Northwest Territories		1
Total number of trips in Canada outside Alberta		76

Source: I.B.M. card data for the first three trips recorded in question one, Part B of 102 questionnaires.

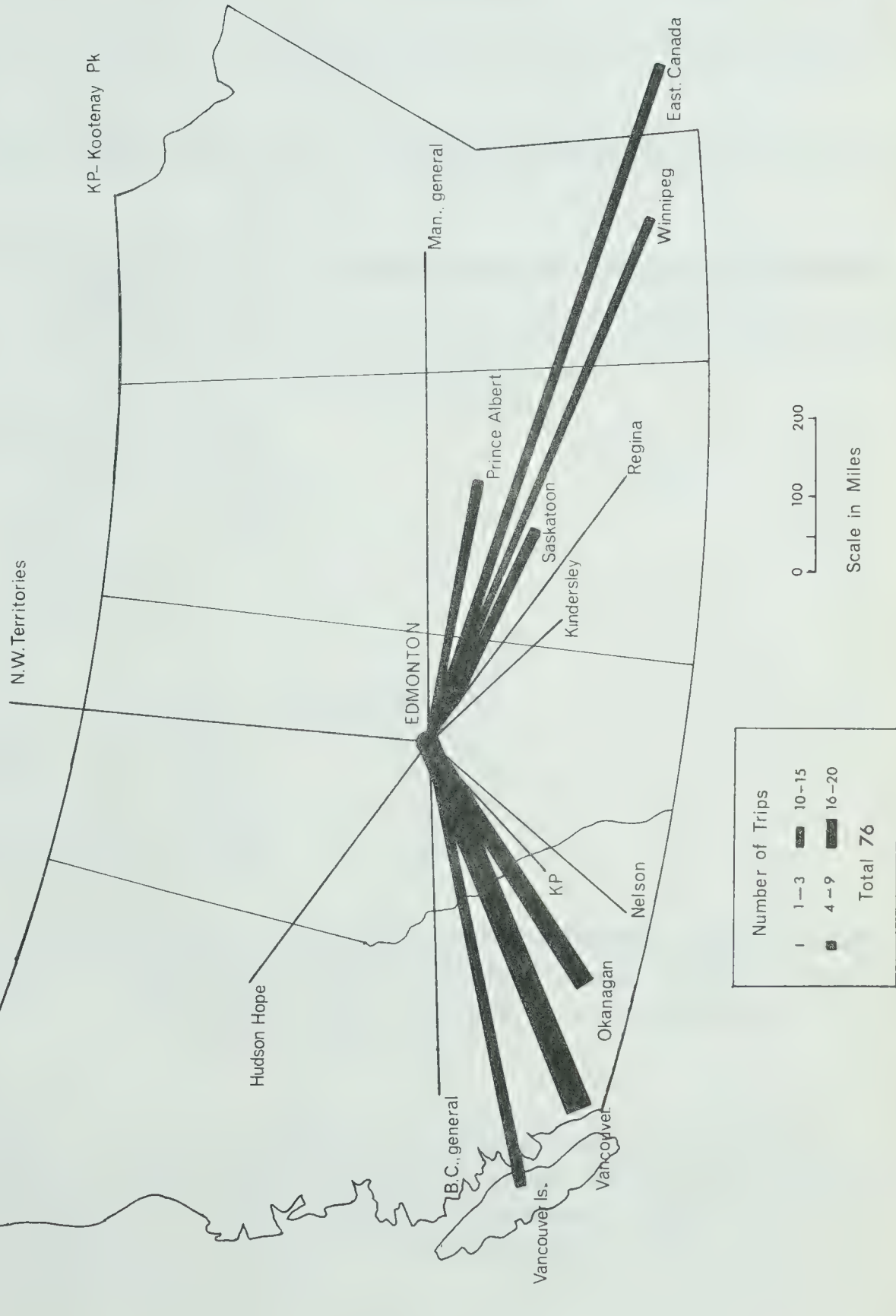
^aSeven trips to Victoria.

^bSeventeen trips to Vancouver.

^cOne trip to Kamloops and one to Prince George.

^dThree trips to Prince Albert National Park.

VACATION TRIPS BY RESPONDENTS IN CANADA OUTSIDE ALBERTA



Source: Table 4 3(B)

FIGURE 2

city of Winnipeg. A total of four trips were made to provinces in Central Canada and the Maritimes. Of these, two trips were to the city of Toronto and one was to Montreal.⁵

TABLE 4-3(C) Distribution of Vacation Trips by Destination
(Trips in Alberta)

Destination	Frequency
More than 150 miles from Edmonton (28)	
Peace River area	5
Rocky Mountain area	16
Jasper -- 6	
Banff -- 9	
Waterton -- 1	
Foothills area	3
Calgary	4
Within 150 miles of Edmonton (9)	
Moose Lake area	3
Sylvan Lake area	2
Pigeon Lake area	2
Wabamun Lake area	2
Total trips	37

Source: I.B.M. card data for the first three trips recorded in question one, Part B of 102 questionnaires.

⁵There was an interesting contrast here between the destinations of respondents in the present study and those in W.N. Baker's sample of Southern Saskatchewan people. The Saskatchewan people were oriented much more to the East. W.N. Baker, op. cit., p. 21.

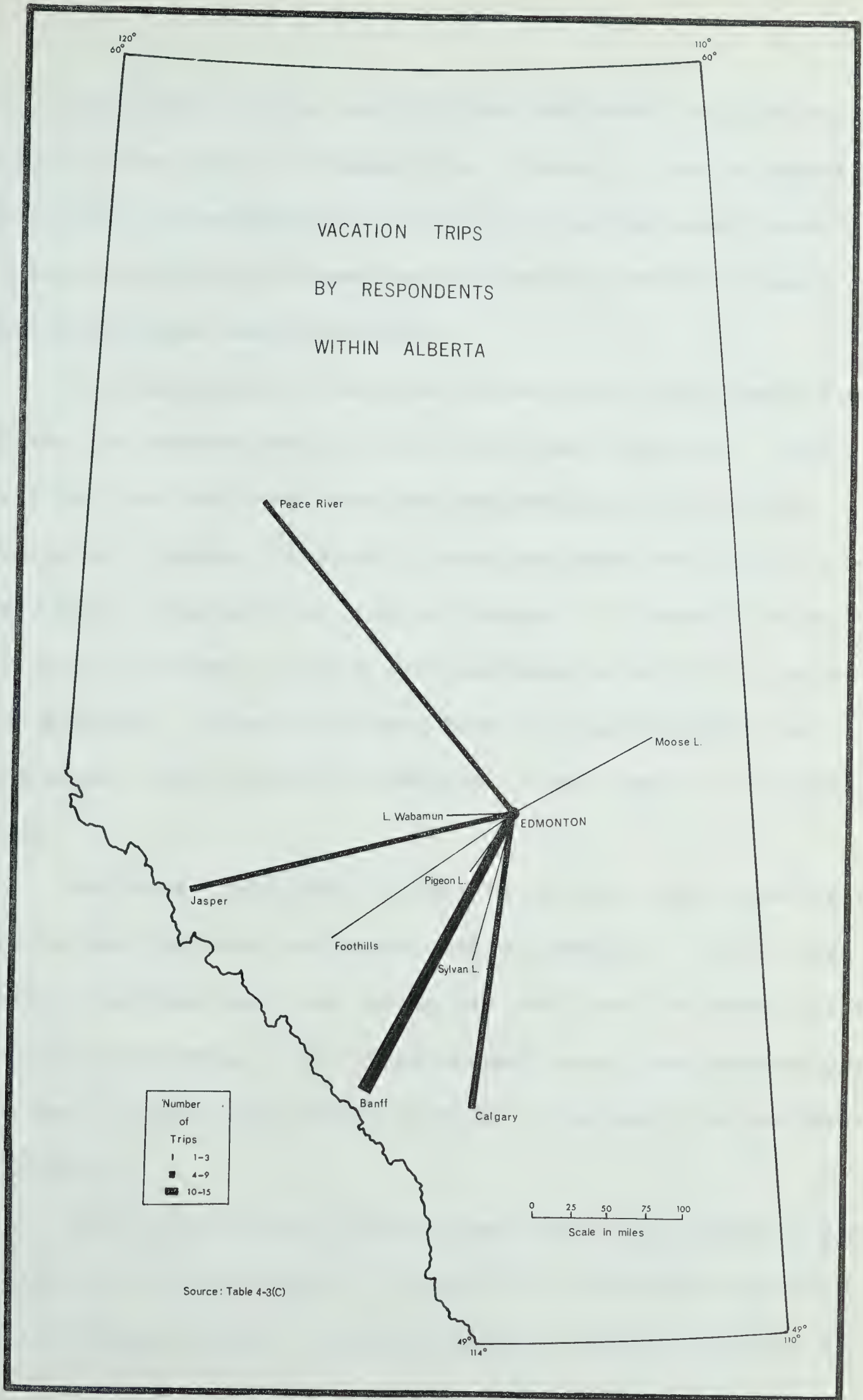


FIGURE 3

Only one trip was made to the Northwest Territories. It was to the city of Yellowknife. Travel to the Northwest Territories is handicapped both by the lack of paved roads and by the distance between centres which provide adequate tourist services and facilities.

The respondents' Vacation trips within the province of Alberta are summarized in Table 4-3(C) and Figure 3. Over forty per cent of these were to destinations in the Rocky Mountains. Other frequently visited locations were the Peace River area and the city of Calgary. It should be noted that both of these are more than one hundred and fifty miles from Edmonton. Nine trips were made to places within one hundred and fifty miles of Edmonton. These were all to lake areas.

For those trips within Alberta, almost eighty per cent were to destinations south and west of Edmonton. For those outside the Province, over sixty per cent were to destinations in British Columbia. For those abroad, more than seventy per cent were to American States located to the south or southwest of Edmonton.

Such a directional pattern was expected because of the attraction and the relative proximity of the Rocky Mountains and the Pacific coast. These provided a greater contrast to

recreation resources in the Edmonton area than travel to the East.

Hence for Edmontonians, it is the plains rather than the mountains that act as a barrier to recreation travel. This seems ironic as it is the reverse of usual transportation theory.⁶ The barrier may be explained in terms of the lack of relatively different things of interest to see and do.

For example, compare a fifteen hundred mile trip, one way, to the southeast along the Trans-Canada Highway, with a trip of similar mileage southwest to San Francisco. The trip to the southeast could easily require one to travel through nine hundred miles of plain and prairie to Regina and Winnipeg and then through another six hundred mile of "Shield" country to Fort William, Sault Ste. Marie and Sudbury. A trip of similar mileage to the southwest could take one through Jasper, Banff, the Okanagan Valley, Vancouver, Seattle, the Oregon coast to San Francisco.

In a paper entitled "An Approach to Research in Recreational Geography," Colin Campbell defined vacation travel in

⁶A.H. Meyer and J.H. Strietelmeier, Geography in World Society, A Conceptual Approach, Philadelphia, 1963, p. 305.

terms of a linear, highway oriented circuit.⁷ In these terms two major Vacation circuits were identified by reference to the routes taken by respondents on touring trips. The first circuit follows the routes usually taken by respondents traveling to Vancouver. (Figure 4, following page 74). The shortest route runs south from Edmonton along Highway No. 2 to Calgary and west along the Trans-Canada Highway via Kamloops to Vancouver and Victoria. Figure 4 shows several alternative routes, one via Jasper, another via the Okanagan and a third via Kimberley and Trail. These alternatives allow one to choose a circular route.

An extension of this circuit may be defined by the routes usually taken by respondents traveling to Seattle. (Figure 5, following page 78) The shortest route from Edmonton runs west along the Trans-Canada to Vancouver and south to Seattle. Figure 5 shows an alternate route to Seattle via Waterton National Park and Spokane.

In addition to these two Vacation circuits of lesser importance may be defined. One circuit follows the Trans-Canada route east through Regina and Winnipeg to Toronto and Montreal. The second circuit runs northwest along the Alaska

⁷ C.K. Campbell, "An Approach to Research in Recreational Geography," unpublished paper, Canadian Association of Geographers, British Columbia Division, March, 1966, pp. 8-10.

Highway through Fort St. John, and Whitehorse to Fairbanks.

Interests or activities on Vacation trips

For each vacation trip listed, respondents were asked to indicate the activities or interests that took them there. The following table is a summary of the answers obtained.

TABLE 4-4 Activities and Interests Indicated as a Percentage Of All Interests Recorded

Interest or Activity	Frequency	Percentage
Visiting Friends or relatives	68	23.4
Sightseeing	65	22.4
Swimming	29	10.0
Fishing	26	9.0
Camping	21	7.3
Golf	14	4.8
Relaxing or loafing	9	3.1
Touring or driving for pleasure	8	2.7
Photography	7	2.4
At a cottage	4	1.4
Shopping	4	1.4
Scenery	4	1.4
Sunbathing	4	1.4
Others	27	9.3
Total	290	100.0

Source: I.B.M. card data for the first three listed activities on each of the first three trips recorded in question one, part B of 102 questionnaires.

As already pointed out, the directional pattern of Vacation trips for the respondents was to the south and the southwest. This pattern correlates well with the interests recorded. (Table 4-4) The related activities of sightseeing, touring or driving for pleasure, and picture taking, which accounted for about thirty per cent of the total activities recorded, emphasized the respondents' desire to see something different from their home area. Water related activities such as fishing, swimming and sun-bathing are oriented to suitable lake or coastal areas. Such areas are to be found in the Rocky Mountains, the Okanagan Valley, and the Pacific coast. Camping in the mountains was also an important activity for the respondents.⁸

Activities such as visiting friends or relatives, going to a cottage or shopping, which accounted for a further twenty-five per cent of the activities are directly concerned with destination.

The presence of friends or relatives in a town, with

⁸ Miss B. Saunders commented in an interview that there had been an upsurge in the popularity of camping in the last three or four years, as camping equipment had improved and the number and size of camping areas had increased. Pers. comm. B. Saunders, A.M.A., Edmonton.

A list of interests of vacationers obtained in an interview with Mr. E.S. Bryant tallies well with Table 4-4, particularly in the emphasis on water related activities, and sightseeing or points of interest. Pers. comm. E.S. Bryant, Director, Alberta Government Travel Bureau, Edmonton.

whom the family may stay overnight or longer, may be of considerable importance to many respondents on their vacation. Respondents may also find that the vacation is the only time when they are able to visit relatives living some distance away.

In addition to the data analyzed above, information was gathered also from the respondents about a specific vacation trip. To assist the respondent to recall such a trip, he (she) was asked to recall the most recent Vacation trip of the type which he (she) had repeated most often in the previous five years. An analysis of specific questions concerning the means of transportation, the composition of the group traveling, and the month of the trip is contained in Tables 4-5 to 4-7. In these tables the term "repeated" calls attention to the fact the tables are a compilation of this specific trip.

The automobile was the means of transportation for eighty-eight per cent of the repeated trips of a week or more duration. Other means of transportation such as buses and trains accounted for only seven and four per cent respectively of these trips. Of necessity, respondents travelled by boat or plane to such places as the British Isles and Hawaii. In addition, it was also expected that several of the trips to

TABLE 4-5 Mode of Transportation on "Repeated" Vacation Trips

	Frequency	Percentage
Automobile	64	87.7
Bus	5	6.8
Train	3	4.1
Others	1	1.4
Total Respondents Answering	73	100.0

Source: I.B.M. card data for Question four, Part B of 102 questionnaires (where more than one mode of transportation was specified for a given trip, only the first one mentioned was included).

Eastern Canada and the Eastern United States, especially to Florida, were by plane. However, since such trips were not the type which were the most frequently repeated Vacation trips, they were not recorded in the questionnaire.⁹

The findings agree with those of an O.R.R.R.C. study which also found that the "family's own automobile" was by far the most popular mode of transportation.

More than 80 per cent of families traveled in their own cars. Although vacation travel by air plane was infrequent, it is interesting to note that more vacation

⁹ Only one trip of a thousand miles or more from Edmonton was repeated by respondents in the given time period.

travelers went by plane than by either train or bus. As might be expected, the proportion of vacation travelers who went by air rose with income, from 4 per cent among families with incomes under \$3,000 to 12 per cent among those with incomes of \$10,000 or more. Conversely, bus travel declined with income. Going by train or the family car does not vary greatly by income.¹⁰

TABLE 4-6 Companions of the Respondent on "Repeated" Vacation Trips

	Frequency	Percentage
Mostly family members	60	81.1
Mostly friends	10	13.5
No companions	4	5.4
Number of respondents answering	74	100.0

Source: I.B.M. card data for Question four b, Part B of 102 questionnaires.

Of the respondents who answered the question concerning "repeated" Vacation trips, eighty-one per cent specified that they had traveled mainly with members of their family. Another fourteen per cent recalled that they had traveled mainly with friends. Only five per cent stated that they had traveled alone.

The study included a higher proportion of family trips than the sample in the O.R.R.R.C. Report No. 20. In the

¹⁰ O.R.R.R.C. Study Report 20, op. cit., p. 44.

American study it was found that there was some tendency for family trips that included children to be shorter in distance and especially in duration than trips which did not include children.¹¹

TABLE 4-7 Season of "Repeated" Vacation Trip Indicated As a Percentage of All Repeated Vacation Trips

Season (Months)	Frequency	Percentage
Winter (Dec.-Feb.)	2	1.6
Spring (Mar.-May)	10	8.2
Summer (June-Aug.)	81	66.4
June -- 6 ^a		
July -- 36		
August -- 39		
Fall (Sept.-Nov.)	29	23.8
Sept. -- 19		
Oct.-Nov. -- 10		
Number of months specified	122 ^b	100.0
Number of respondents reporting trips all year round	3	-
Number of respondents answering	69	-

Source: I.B.M. card data for Question four c, Part B, of 102 questionnaires.

^a Number of trips made in June (etc.)

^b Some respondents specified more than one month.

¹¹ O.R.R.R.C. Report 20, op. cit., p. 45.

Two-thirds of the respondents took trips of a week or more duration during the summer.¹² July and August were the most popular months. Since the majority were family trips, this trend is without doubt closely linked with the fact that primary and secondary schools are closed during those months.

The next two most popular seasons for Vacation trips were Fall and Spring. Nineteen out of twenty-nine Fall trips were taken in September. Spring and Winter months accounted for eight and two per cent respectively of all the months specified.

It was unfortunate that information on the means of travel, travel companions, and the month of travel was limited to trips of less than a thousand miles. It seems likely that for the longer trips, such as those to Europe and the Caribbean, respondents would have traveled by plane. Perhaps only the wife and/or the husband would have gone. Other long distance trips to the south such as those to Florida, were likely

¹² In creating the category "trips of a week or more duration" the assumption was made that the majority of such trips would be taken as part or all of the respondent's annual vacation. It was also expected that the majority of these would be taken during the summer. If the first assumption is correct then one can say that at least two-thirds of the respondents' Vacation trips were taken during the summer months, a characteristic of Canadian travel indicated by previous recreation travel studies. For example, in W.N. Baker's A Report on Outdoor Recreation in Southern Saskatchewan, Dept. of Natural Resources, Regina, 1958.

winter trips. Here, also, it is likely that respondents traveled by plane.

Analysis of Touring Trips

In order to further clarify the nature of vacation travel, it was necessary to distinguish between two types of vacation trips made by the respondents. The first was the type in which the destination was the principal and often the sole focus of interest. A vacation trip to a summer cottage may be cited as an example. The second type was the touring trip. In this case although the final destination was usually of considerable interest, both the stops and the stopovers made along the route provided an important source of interest.¹³

In order to examine in more detail the nature of the touring trips, respondents were asked to list the places or areas they stayed, on their most recently repeated Vacation trip, the duration of each stopover, and the interests for each place. Frequent stopovers were recorded for such places as Calgary, Banff, Jasper, the Okanagan Valley, Vancouver and

¹³"Stops"- Often respondents would stop along the route at various points of interest to take part in some activity or to have a meal. At a "stopover," however, a respondent would at least stay overnight. Respondents were asked to provide information concerning the latter but not the former.

Seattle. These were almost identical with the most frequently visited destinations.

Another aspect of the touring trips was examined by attempting to establish the route or routes which the respondents took to such frequently visited places as Vancouver, Victoria, the Okanagan Valley, and Seattle. An individual analysis of the trips of respondents to each of these centres was made. In addition to the establishment of the routes taken, information was gathered on the places stayed, the duration of the stopover, and the interests at each of the stopovers, wherever such data was included in the questionnaire.

Touring Trips to Vancouver

TABLE 4-8 Analysis of Time Spent on Trips to Vancouver

Place or Area	Number of Days
Vancouver	5.9
Places along the route	2.0
Travelling	3.4 ^a
Total	11.3

Source: analysis of questions one and three, Part B of 102 questionnaires.

^aA residual figure. The estimated driving time to and from Vancouver at an average speed of 50 m.p.h. is thirty-four hours.

Respondents on touring trips to Vancouver traveled mainly in family groups, by car, and during the summer months. The duration of their trip ranged from seven to eighteen days. The average duration of their trip was eleven days.¹⁴ On the average, six days were spent in Vancouver, and two days at stopovers. It was assumed that the remaining days were spent traveling. (Table 4-8)

Thus, on the average, respondents spent at least one-half their vacation at their destination, Vancouver. The chief interests recorded for Vancouver were those of visiting friends or relatives, sightseeing (the parks were special points of interest), shopping, swimming, fishing, and boating.

Routes

The shortest route between Edmonton and Vancouver in terms of mileage and time is the one which runs south on Highway No. 2 to Calgary and west along Highway No. 1 (The Trans-Canada) via Kamloops. (Figure 4) This route is approximately eight hundred and thirty-nine miles.¹⁵ Judging from the places visited by respondents traveling to Vancouver, several less direct routes were taken. At least five of the

¹⁴In order to avoid a positive "skew" in the average figure, a trip of two months, by a retired gentleman, was omitted.

¹⁵Alberta Motor Association mileage figure, one-way.

RESPONDENTS' TOURING TRIPS TO VANCOUVER

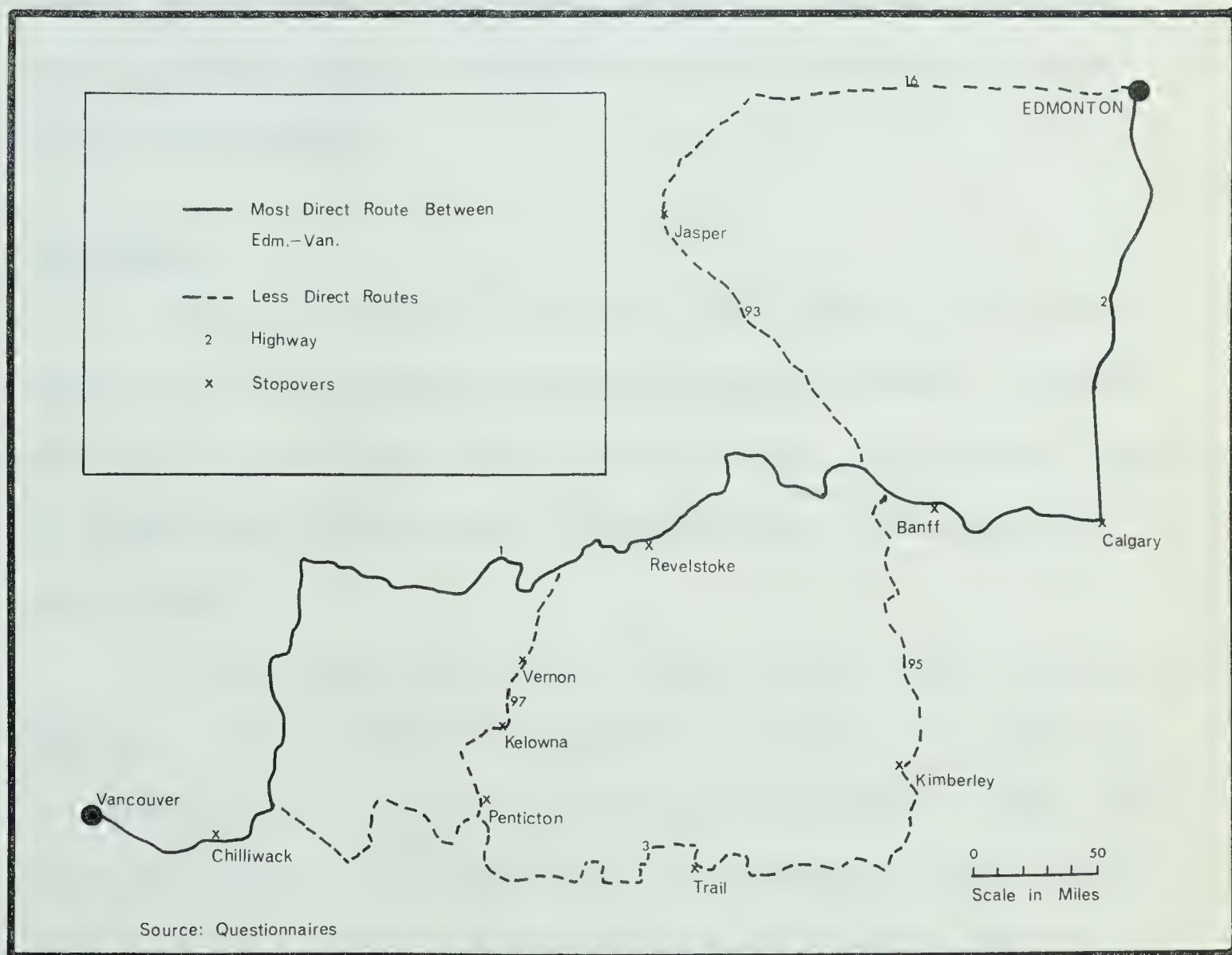


FIGURE 4

seventeen respondents traveled via the Okanagan Valley,¹⁶ while an additional two respondents reported driving an additional one hundred and three miles via Jasper. Only one respondent reported traveling to Vancouver via Kimberley and Trail. Also respondents could have taken one route to Vancouver and another one on their return. Although this was likely, verification could not be made if this was in fact done by respondents.

Stopovers

Along the route to Vancouver, two general areas were pinpointed as the common overnight stopping places. Depending on the route taken these were, firstly, the Calgary, Banff, or Jasper area and secondly, the Kamloops or the Okanagan Valley area.

In the Calgary Banff and Jasper areas, some respondents only stayed overnight, camping in one of the park areas or obtaining commercial or private accommodation. Other respondents remained in this area for a period of from one to two days during which they participated in such activities as sightseeing, taking pictures, swimming in the hot springs,

¹⁶ The Okanagan route is only twelve miles longer but the route takes a longer time than the one through Kamloops.

fishing, hiking, or relaxing.¹⁷

Respondents traveling the shortest route via Kamloops usually only stayed overnight. Overnight stops were recorded at such centres as Revelstoke, Vernon, Kamloops and Chilliwack. Campers had their choice of several National Parks. Kelowna and Penticton were the favourite stopping centres in the Okanagan Valley. Two of the seventeen respondents recorded spending a total of four days in the Okanagan Valley. Interests and activities in the Okanagan Valley included sightseeing, swimming, camping, relaxing, and fruit.¹⁸

Touring Trips to Victoria

The analysis of the seven trips recorded by respondents to Victoria were similar to those to Vancouver, with the exception of the additional journey by ferry to Victoria. More time was spent by respondents in Vancouver, however, than in Victoria. Activities in Victoria included sightseeing, photography, and fishing.

¹⁷ Both at Vancouver and along the route, the interest most often mentioned was "visiting friends or relatives." The practice of staying with friends or relatives moreover could have often substantially reduced the cost of travel for respondents by reducing food and accommodation costs.

¹⁸ One respondent recorded picking fruit in the Okanagan Valley. Fresh fruit and vegetable stands abound along the highway.

Touring Trips to the Okanagan Valley

The analysis of the twelve trips to the Okanagan Valley was also similar to the analysis of those to Vancouver, with the exception of the fact that the respondents only traveled as far as the Okanagan, and that it was in the Okanagan that they spent more than half the time of their trip. Kelowna and Penticton were the favourite places. The activities of camping, swimming, and golf were the most popular ones recorded. Next came sightseeing, fruit, fishing, and relaxing.

Touring Trips to Seattle

Like those who traveled to Vancouver, the respondents traveling to Seattle made the journey mainly in family groups, by car, and during the summer months of June, July and August. The trips averaged fourteen days in duration with an individual range of between seven and thirty-one days. Sightseeing and shopping were the main interests expressed. In addition, two respondents traveling in the summer of 1963 stated that they were attracted to Seattle by the World's Fair.

The most direct route to Seattle was via Kamloops and Vancouver, a distance of nine hundred and fifty-three miles

from Edmonton.¹⁹ Respondents also could choose a major alternate route through the United States via Spokane and Coeur d'Alene. (Figure 5) At least three of the ten respondents indicated that they had traveled the Canadian route via Vancouver on one leg of their journey and the American route via Spokane on the other.²⁰ It is likely that the choosing of different routes was the rule rather than the exception.

Along the Canadian route the most frequent stopover was made at Vancouver. Four out of ten respondents recorded stopovers at Vancouver. Stopovers also occurred at such centres as Victoria, Penticton, Kelowna, and Banff. Along the American route stopovers were recorded for Spokane, Coeur d'Alene and Waterton Park. The major interests and activities along the routes were camping, fishing, swimming, golf, and visiting friends and relatives.

Summary

A family trip by car during the summer was the most commonly repeated vacation, for trips under a thousand miles. These characteristics tied in well with the interests and

¹⁹ Alberta Motor Association mileage figure, one way.

²⁰ Eleven trips were recorded by ten respondents.

RESPONDENTS' TOURING TRIPS TO
SEATTLE

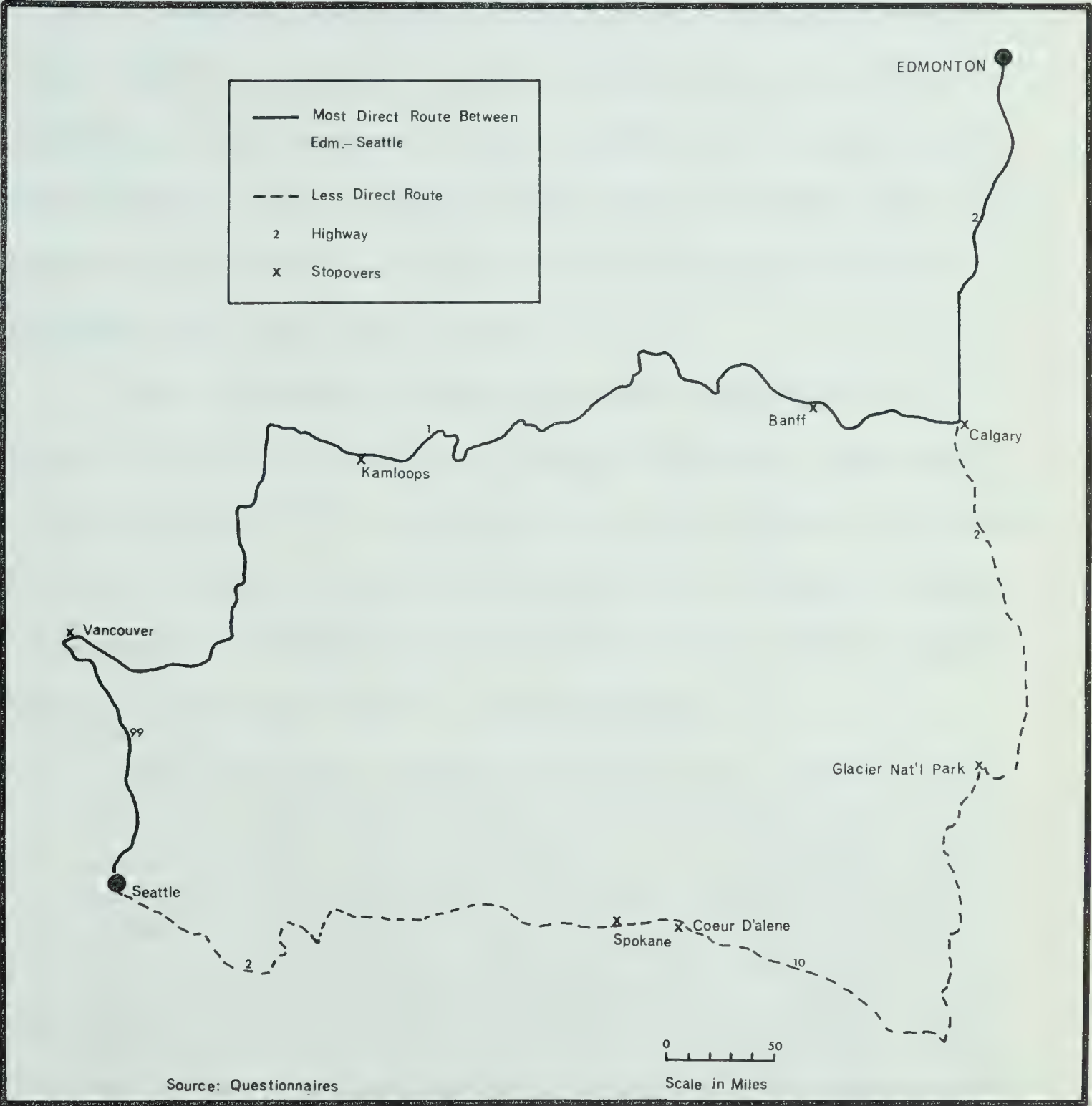


FIGURE 5

destinations recorded for a great many of the Vacation trips. The car, for example, allowed respondents to make frequent stops at various points of interest to the family, and the summer weather permitted outdoor activities, particularly swimming, to be enjoyed. It was evident that trips to the Rocky mountains and the British Columbia coast did offer these interests and activities with the motoring range that the respondents were willing to drive.

Colin Campbell's description of a vacationist is closely related to the characteristics shown by respondents on touring trips.²¹ A description of the distinction he made between a vacationist and a recreationist provides a summary of the nature of much of the Vacation travel of the respondents in the present study. He suggested

...that we place recreationists and vacationists at two ends of a spectrum, due to the contradictory nature of their aims and opportunities.... The recreationist, because the activity is dominant in the recreation experience, will tend to spend less time traveling and will be less concerned with the nature of the journey from the city to the recreation area.... At the other end of this continuum is the vacationist who is concerned with seeing as many places as possible in a fixed time period...their route will be circular and the journey will be of greater significance than any activity involved.²²

²¹C.K. Campbell, op. cit., pp. 8-10.

²²Loc. cit.

The pattern of Vacation trips was mainly characterized by a linear circuit which, for the most part, lay to the south and west of Edmonton. In terms of trip destinations, the demand for recreational areas within Alberta appeared to be small in comparison to those outside the Province. Banff, Jasper and the various cottage lakes such as Pigeon and Sylvan attracted the greatest number of respondents within the Province. Also the demand for facilities and services at Banff and Jasper were increased by stopovers made by vacationers bound for destinations outside Alberta.

Outside Alberta, the most frequent destinations were places in British Columbia, particularly the Okanagan Valley and Vancouver. Comparatively few trips were made to the province of Saskatchewan. Still fewer were to the other provinces.

The reason for this pattern was explained by the attraction of the mountain and coastal scenery as well as by the attraction of the water activities of the deep, clear lakes. Both of these provided a contrast to the recreation resources of the Edmonton area.

In terms of destinations outside Canada, the United States, particularly the west coast States of Washington and California, attracted the greatest number of trips. In

addition a few respondents traveled to Europe, the Caribbean and Mexico.

In terms of mileage, the most frequently traveled distance ranged from one hundred to one thousand miles, one way. The destination in the median case was about seven hundred miles from Edmonton.

CHAPTER V

ANALYSIS OF WEEKEND TRIPS

This chapter summarizes the trips of two to six days duration, that is, Weekend trips recorded by respondents for the period 1964-65. Tables 5-1 to 5-4 summarize the duration and destination of the Weekend trips as well as the interests and activities of the respondents during their trips. Tables 5-5 to 5-7 indicate the mode of transportation, the travel companions of the respondent, and the season of travel on "repeated" trips.

TABLE 5-1 Distribution of Weekend Trips by Duration

Duration of Trip in Days	Frequency	Percentage
2 to 3	135	75.8
4 to 6	43	24.2
Total	178	100.0

Source: I.B.M. card data for the first three trips recorded in question one, Part C of 102 questionnaires.

In the analysis of trips of two to six days, it was expected that the curtailment of travel time would cause a corresponding curtailment in the distance traveled by respondents. Seventy-six per cent of the Weekend trips were trips

of two or three days.¹ (Table 5-1) The remaining twenty-four per cent of the trips were from four to six days in length.

TABLE 5-2 Summary of the Distribution of Weekend Trips by Destination

Destination	Frequency	Percentage
Trips abroad	3	1.6
Northwestern United States	-- 3	
Trips in Canada outside Alberta	18	10.0
British Columbia	-- 11	
Saskatchewan	-- 7	
Trips within Alberta	158	88.4
More than 150 miles from Edmonton	-- 86	
Between 100-150 miles from Edmonton	-- 42	
Within 100 miles of Edmonton	-- 30	
Total Weekend trips	179	100.0

Source: I.B.M. card data for the first three trips recorded in question one, Part C of 102 questionnaires.

¹ It was assumed that most of these two to three day trips were taken on Saturday and Sunday rather than during the week.

Destinations on Weekend trips

Distance Traveled

The most frequently traveled distance on Weekend trips ranged from fifty to three hundred miles, one way. In the median case, the destination was about one hundred and fifty miles from Edmonton.²

Considering the duration of the trips, it was not surprising to find that Weekend trips were much more confined to the province of Alberta than the Vacation trips. (Table 5-2) Eighty-eight per cent of the Weekend trips were to destinations within Alberta. For Vacation trips, this figure was twenty-one per cent. Trips to destinations abroad and to destinations in Canada but outside Alberta, accounted for two per cent and ten per cent respectively of all Weekend trips. For those within Alberta, almost half were to destinations of one hundred and fifty miles or less from Edmonton. This last group of trips was within the intermediate recreation area which, according to Marion Clawson, lies between the resource based areas such as Banff and Jasper and the user oriented areas such as municipal parks.³ Clawson stated that:

² Figures were based on Table 1-2, page 30.

³ M. Clawson, R.B. Held, C.H. Stoddard, Land for the Future, "Land for Recreation," Baltimore, 1960, pp. 136-7.

The intermediate area must be within reasonable distance- perhaps one to two hours' travel time- of most of its users, and it is intermediate in that its physical characteristics are important but not all dominant.... Typically, a recreation area of this kind is a state park, possibly a large municipal park, located outside of but not too distant from a major city; it is used primarily for all day and weekend recreation; ideally contains attractive forests and waters and is used for somewhat more extensive recreational undertakings than are the city parks and playgrounds.⁴

Wabamun Provincial Park about fifty miles west of Edmonton is an example of a park specifically designed to meet the needs of Edmontonians for intermediate recreation areas.

As shown in Table 5-3(A) and Figure 6, the major direction on Weekend trips outside Alberta was southwest of Edmonton. The three trips abroad were to destinations in the Northwestern United States, namely, to Washington, Oregon and Montana. Eleven of the eighteen trips to other provinces in Canada were to British Columbia. Seven trips were recorded to the province of Saskatchewan.

Summarized in Table 5-3(B) and Figure 7, are the respondents' Weekend trips within the province of Alberta. About one-third of these were to destinations in the Rocky Mountains. The city of Calgary and the Peace River area were the next most frequently visited locations more than one

⁴Loc. cit.

TABLE 5-3(A) Distribution of Weekend trips by Destination
(Trips abroad and trips in Canada outside
Alberta)

Destination	Frequency
Trips Abroad (3)	
Northwestern United States	3
Washington --	1
Oregon --	1
Montana --	1
Trips in Canada outside Alberta (18)	
British Columbia	11
Coastal B.C. ^a --	2
Okanagan Valley --	2
Kootenay Park area --	4
Nelson area --	2
Hudson Hope area --	1
Saskatchewan	7
Saskatoon area --	2
Lac La Ronge --	1
Regina --	2
Sask., general --	2
Total trips	21

Source: I.B.M. card data for the first three trips recorded in question one, Part C of 102 questionnaires.

^aOne trip each to Vancouver and Victoria.

hundred and fifty miles from Edmonton.⁵ Within one hundred and fifty miles of Edmonton, fishing and cottage lakes were

⁵This was similar to the pattern found for Vacation trips in this area.

WEEKEND TRIPS BY RESPONDENTS OUTSIDE ALBERTA

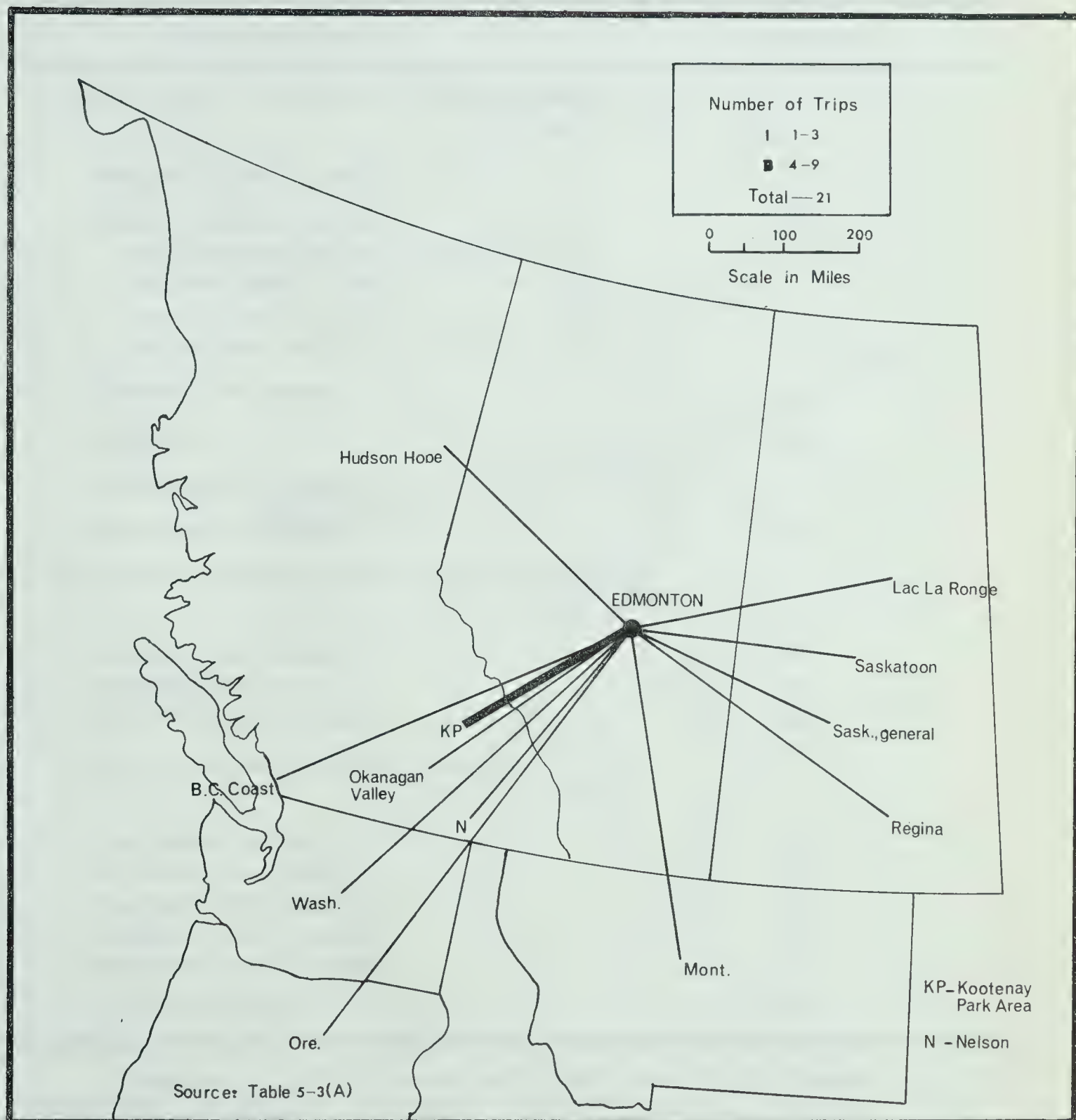


FIGURE 6

TABLE 5-3(B) Distribution of Weekend Trips by Destination
(Trips within Alberta)

Destination	Frequency
More than 150 miles from Edmonton (86)	
Peace River area ^a	9
Rocky Mountain area	49
Wilderness Prov. Park --	2
Jasper Nat'l Park --	27
Banff Nat'l Park --	19
Waterton Nat'l Park --	1
Foothills area	6
Calgary	14
Drumheller area	5
Southern Alberta	4
Between 100-150 miles from Edmonton (42)	
Moose Lake area ^b	16
Sedgewick area	8
Sylvan Lake area ^c	18
Within 100 miles of Edmonton (30)	
Barrhead area ^d	3
Athabasca area	9
Vegreville area	1
Pigeon Lake area ^e	6
Wabamun Lake area ^f	11
Total trips	158

Source: I.B.M. card data for the first three trips recorded in question one, Part C of 102 questionnaire.

^a Five trips to Peace River.

^b Five trips to Moose Lake and two to Whitefish Lake.

^c Seven trips to Red Deer, six to Sylvan L. & two to Gull L.

^d Four trips to Baptiste L. and two to Long L. Prov. Park.

^e Two trips to Pigeon Lake.

^f Five trips to Wabamun, and five to Lac Ste. Anne.

WEEKEND TRIPS BY RESPONDENTS

WITHIN ALBERTA

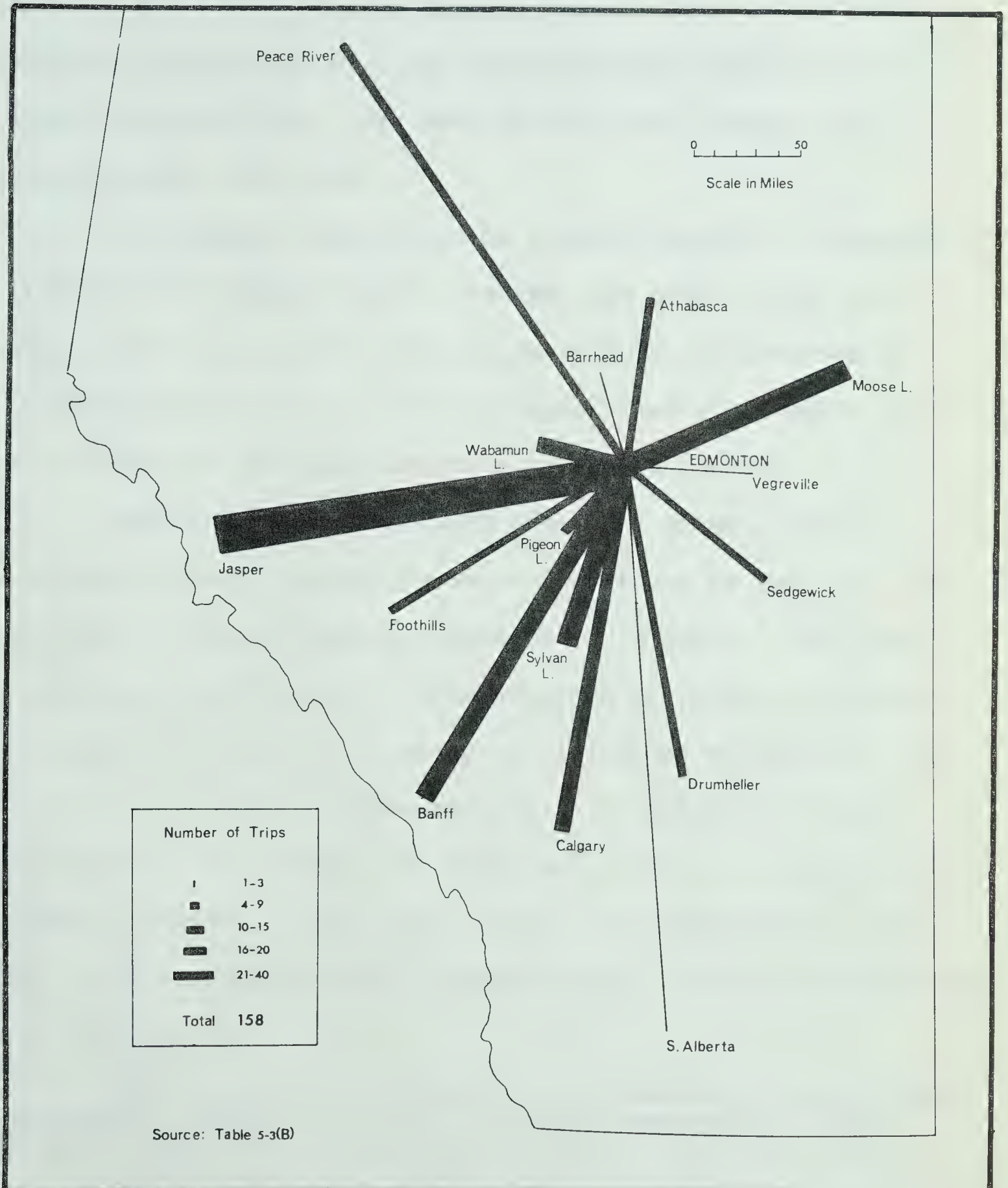


FIGURE 7

the most frequently visited places. Moose Lake and Baptiste Lake were the most popular fishing lakes, while Sylvan Lake, Wabamun Lake and Lac Ste. Anne were the most frequently recorded cottage lakes. Red Deer was the most popular urban centre within this area.

In terms of direction, the dominant pattern of Weekend travel within Alberta was to the west and south of Edmonton. About seventy per cent of the trips were to destinations in these directions. It is in these areas that the popular cottage lakes and the Rocky Mountain parks are located.

Adapting Colin Campbell's idea of a linear, highway oriented circuit, a major Weekend circuit can be defined.⁶ It follows the routes taken by respondents to Banff.⁷ One route runs west along Highway 16 from Edmonton via Edson and Hinton to Jasper, and then south along the Jasper-Banff Highway. An alternate and shorter route runs south from Edmonton along Highway No. 2 to Calgary and then west along the Trans-Canada Highway to Banff. About two-fifths of the respondents' Weekend trips would fall into a classification based on destinations

⁶C.K. Campbell, "An Approach to Research in Recreational Geography," unpublished paper, Canadian Association of Geographers, British Columbia Division, March, 1966, pp. 8-10.

⁷As a result it forms the first section of the major Vacation circuit to Vancouver and Seattle.

visited along this circuit.

Specific trips to visit friends or relatives,⁸ or to fish or hunt as well as trips to cottages and public beaches at such lakes as Wabamun, Pigeon, and Sylvan do not align themselves into a linear circuit. These could be described spatially in terms of a "regional recreation complex" and defined as an area within 150 miles or within one to three hours driving time from Edmonton.⁹

Interests or activities on Weekend trips

The main interests and activities recorded for Weekend trips focused on visiting friends or relatives, sightseeing and water activities. (Table 5-4) The pattern was quite similar to that recorded for Vacation trips.

An analysis of the "repeated" Weekend trips showed that the mode of transportation, travel companions, and the month of travel were also very similar to those of the Vacation trips.

The seasonal distribution of trips of two to six days duration was similar to the distribution on trips of a week or more duration. Summer was the most popular time of the

⁸Ten trips were recorded specifically as trips to visit friends or relatives on a farm.

⁹The phrase is Campbell's. C.K. Campbell, op. cit., p. 10.

TABLE 5-4 Activities and Interests Indicated As a Percentage of All Interests Recorded

Interest or Activity	Frequency	Percentage
Visiting friends or relatives	49	19.4
Fishing	43	16.9
Swimming	27	10.6
Sightseeing	25	9.9
Camping	17	6.7
Hunting	14	5.5
Boating	12	4.8
Relaxing or loafing	11	4.3
Walking or hiking	7	2.8
Golf	5	2.0
Touring or driving for pleasure	5	2.0
At a cottage	5	2.0
Photography	5	2.0
Others	26	11.2
Total	253	100.0

Source: I.B.M. card data for the first three listed activities on each of the first three trips recorded in question one Part C of 102 questionnaires.

year for a Weekend trip. Fall and Spring followed in popularity. The percentage of winter trips was higher for Weekend than for Vacation travel. Often the Weekend winter trips involved Christmas or New Year's Day. A further thirteen respondents declared that they had taken Weekend trips in all months of the year.

TABLE 5-5 Mode of Transportation on "Repeated" Trips

	Frequency	Percentage
Automobile	71	92.2
Bus	2	2.6
Train	2	2.6
Others	2	2.6
Total number of respondents reporting	77	100.0

Source: I.B.M. card data for question four (a) Part D of 102 questionnaires.

TABLE 5-6 Companions of Respondent on "Repeated" Trips

	Frequency	Percentage
Mostly family members	58	75.3
Mostly friends	16	20.8
No companions	3	3.9
Total number of respondents reporting	77	100.0

Source: I.B.M. card data for question four (b) Part C of 102 questionnaires.

Summary

An analysis of Weekend trips showed that the majority were trips of two to three days duration. The most frequently traveled distance ranged from fifty to three hundred miles,

TABLE 5-7 Season of Repeated Trip Indicated as a Percentage
Of All "Repeated" Trips of Two to Six Days Duration

Season (Months)	Frequency	Percentage
Winter (Dec.-Feb.)	13	8.6
Spring (Mar.-May_	17	11.1
Summer (June-Aug.)	95	62.6
June -- 23a		
July -- 40		
August -- 32		
Fall (Sept.-Nov.)	27	17.7
Sept. -- 16		
Oct.-Nov.- 11		
Number of months specified	152 ^b	100.0
Number of respondents specifying trips all year round ^c	13	-
Number of respondents answering	72	

Source: I.B.M. card data for question four (c) Part C of 102 questionnaires.

^aNumber of trips made in June (etc.)

^bSome respondents specified more than one month.

^cThese excluded from the above percentage calculation.

one way. In the median case the destination was about one hundred and fifty miles. Almost ninety per cent of the trips were within Alberta.

The pattern of trips showed characteristics associated with both Vacation and Day trips. About two-fifths of the

trips could be described in terms of a linear circuit to the south and west of Edmonton, the most frequent destination being Jasper, Banff and Calgary. The pattern of the remaining Weekend trips were described in terms of a regional recreation complex which lay within a maximum distance of one hundred and fifty miles from Edmonton.

CHAPTER VI

ANALYSIS OF DAY TRIPS

This chapter summarizes the Day trips recorded by respondents over the year extending from July 1964 to July 1965. Tables 6-1 to 6-4 summarize the duration and destination of the Day trips, and the respondents' interests and activities. Tables 6-5 to 6-7 indicate the mode of transportation, the travel companions of the respondent, and the season of travel on "repeated" trips.

TABLE 6-1 Distribution of Day trips by Duration

Duration of trip in hours	Frequency	Percentage
Less than three	15	6.9
Three to eight	106	48.6
More than eight	97	44.5
Total	218	100.0

Source: I.B.M. card data for the first three trips recorded in question one, Part D of 102 questionnaires

Few trips of under three hours were recorded by respondents, possibly because in the first three trips listed in the questionnaire they recalled mainly trips which took the major part of a day. (Table 6-1)

TABLE 6-2 Summary of the Distribution of Day Trips By Destination

Destination	Frequency	Percentage
Trips within Alberta (224)		
More than 150 miles from Edmonton	9	4.0
Between 100-150 mi. from Edmonton	16	7.1
Between 50-100 mi. from Edmonton	29	12.9
Within 50 miles of Edmonton	170	76.0
Total	224	100.0

Source: I.B.M. card data for the first three trips recorded in question one, Part D of 102 questionnaires.

As a result of the further curtailment of travel time, the destinations of respondents were all within the province of Alberta. (Table 6-2) Seventy-six per cent of the Day trips were to destinations within fifty miles of Edmonton; thirteen per cent were to destinations between fifty and one hundred miles from Edmonton; and eleven per cent were to destinations more than one hundred miles, or two hours driving time, from Edmonton.

These figures agreed with the findings of an O.R.R.R.C. study which stated that:

Much of this demand [for outdoor recreation activities] is for day-use and must be satisfied close to the metropolitan residence. This is probably because people are unwilling or unable to spend more than two hours in

reaching the recreation area which is somewhere within a maximum range of sixty to one hundred and twenty miles under weekend traffic conditions from home to site. The miseries of traffic congestion that confront the family seeking a one day outing have a tendency to limit distance traveled.¹

Looking at the pattern of the Day trips in terms of the direction from Edmonton, it was found that the dominance of trips to the south and west, so apparent for Weekend and Vacation trips, was no longer evident. Instead, a radial pattern projected from the centre of Edmonton was found. (Figure 8) Although trips radiated in all directions, the most frequently visited places were situated to the east and west of Edmonton along Highway No. 16, to the south along Highway No. 2, and to the south-east along Highways No. 21 and 14.

The most frequently visited places to the west were Lakes Wabamun and Ste. Anne, Edmonton Beach, and the North-west Pioneer Village. (Table 6-3) Popular easterly destinations were the Alberta Game Farm and Elk Island National Park. Southerly trips were made to Lakes Pigeon, Sylvan, and Gull, and to the city of Red Deer. Frequent trips were also made to the south-east to Cooking Lake, Miquelon Lake, and

¹ Outdoor Recreation Resources Review Commission, The Future of Outdoor Recreation in Metropolitan Regions of the United States, Report No. 21, Washington, 1962, p. 13.

TABLE 6-3 Distribution of Day trips by Destination

Destination	Frequency
Trips within Alberta (224)	
More than 150 miles from Edmonton (9)	
Rocky Mountain area	4
Jasper -- 3	
Banff -- 1	
Foothills area	1
Calgary	4
Between 100-150 miles of Edmonton (16)	
Moose Lake area	5
Sedgewick area	2
Sylvan Lake area ^a	9
Between 50-100 miles of Edmonton (29)	
Barrhead area	6
Athabasca area	5
Vegreville area	4
Pigeon Lake area ^b	13
Alberta, general	1
Within 50 miles of Edmonton (170)	
Gibbons area	8
Elk Island area ^c	53
Lakeview area ^d	20
Leduc area	2
Wabamun area ^e	45
City of Edmonton area ^f	42
Total	224

Source: I.B.M. card data for the first three trips recorded in question one, Part D of 102 questionnaires.

Camrose. Within the city of Edmonton, municipal parks such as Storyland Zoo, Borden, Whitemud, Kinsmen, and Coronation were popular choices.

Distance Traveled

The most frequently traveled distance on Day trips ranged from one to fifty miles, one way, from the centre of Edmonton. In the median case the destination was about fifteen miles.² Campbell's phrase, "a metropolitan recreational hinterland," may be used to describe the pattern of Day travel in terms of the area.³ In the present study this phrase has been used to denote an area lying within one hundred miles, or one to two hours' drive, from the respondent's home.

Notes from Table 6-3.

^a Three trips to Gull L. and two each to Sylvan L. and Red Deer.

^b Nine trips to Pigeon Lake.

^c Thirty-one trips to Game Farm, 22 to Elk Is. Nat'l Park.

^d Five trips each to Cooking L., Miquelon L. and Camrose.

^e Fifteen trips to L. Wabamun, 14 to L. Ste. Anne and five each to Edmonton Beach and the N.W. Pioneer Village.

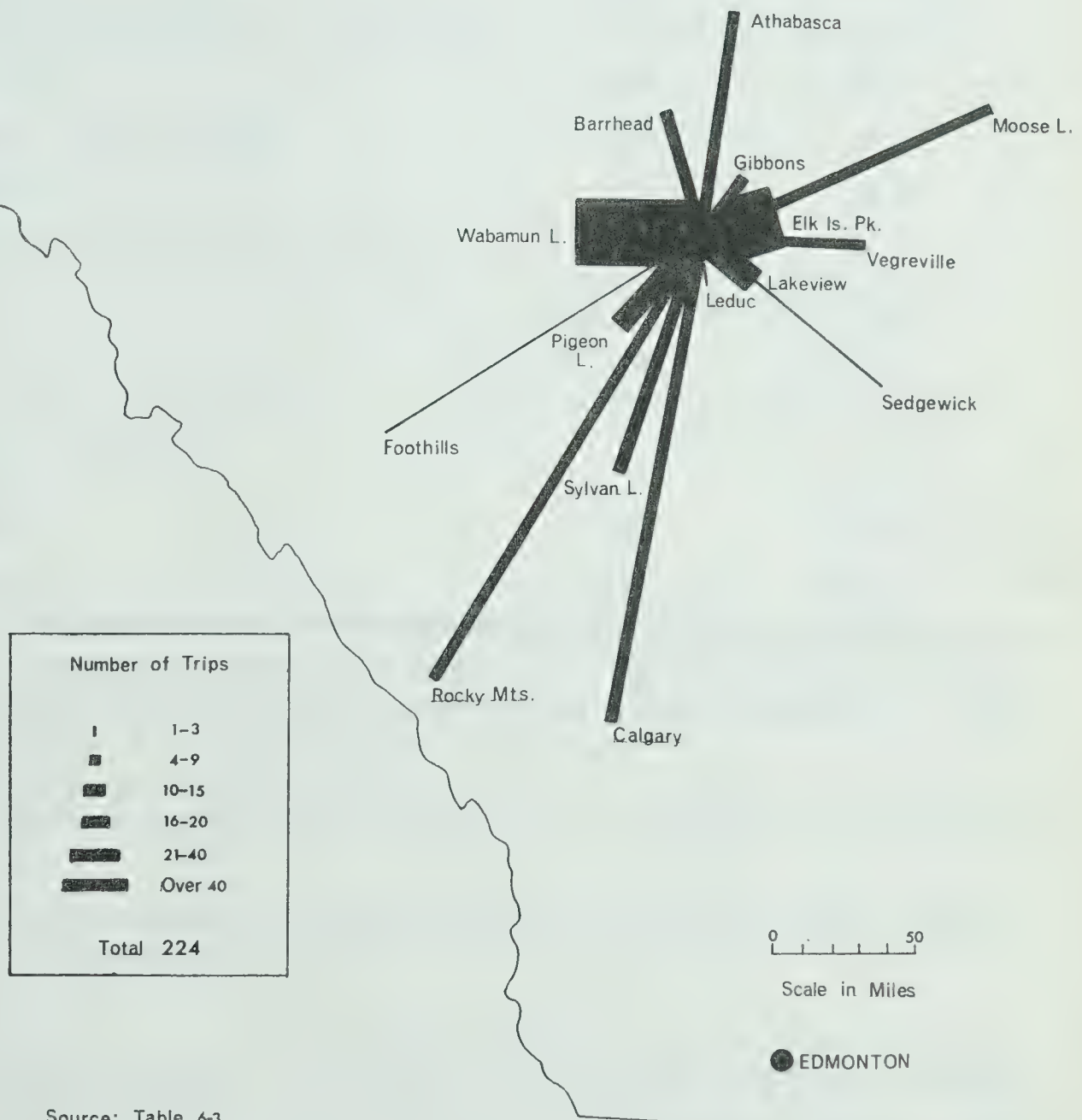
^f Thirty trips to city parks, e.g. Storyland Zoo, Borden, Whitemud, Kinsmen and Coronation.

² Figures were based on Table 1-2, p. 30.

³ C.K. Campbell, "An Approach to Recreational Geography," unpublished paper, Canadian Association of Geographers, British Columbia Division, March, 1966, p. 8.

As a result of this, up to one hundred miles from Edmonton, the Day trip region overlaps with the Weekend trip area.

DAY TRIPS BY RESPONDENTS



Source: Table 6-3

FIGURE 8

TABLE 6-4 Activities and Interests Indicated As Percentage of All Interests Recorded

Interest or Activity	Frequency	Percentage
Picnicking	70	26.5
Swimming	29	11.0
Visiting friends or relatives	25	9.5
Fishing	21	8.0
Seeing the animals ^a	12	4.6
Boating	12	4.6
Because of the children ^b	11	4.2
Golf	11	4.2
Hunting	8	3.0
Relaxing or loafing	6	2.3
At the cottage	5	1.9
Others	53	20.2
Total	263	100.0

Source: I.B.M. card data for the first three listed activities on each of the first three trips recorded in question one Part D of 102 questionnaires.

^a Refers mainly to the reason for going to the Alberta Game Farm.

^b Refers mainly to the reason for going to Storyland Zoo park, Edmonton.

On Day trips picnicking was the most popular activity. This was not the case for Vacation and Weekend travel. However, like Vacation and Weekend trips, the next most frequently recorded activities were swimming, visiting friends

and relatives, fishing and sightseeing. Golf ranked higher both on Day and Vacation trips than on Weekends.⁴ Two categories, "seeing the animals" and "because of the children," were peculiar to Day trips. The first referred mainly to the reason given by respondents for visiting the Alberta Game Farm, whereas the second often referred to the reason for going to the Storyland Zoo park in Edmonton.

TABLE 6-5 Mode of Transportation on "Repeated" Trips

	Frequency	Percentage
Automobile	81	98.8
Bus	1	1.2
Total number of respondents reporting	82	100.0

Source: I.B.M. card data for question four (a) Part D of 102 questionnaires.

For "repeated" Day trips, the automobile was the chief means of transportation. It will be recalled that a similar emphasis was found for Weekend and Vacation travel. (Table 6-5) Also the majority of Day trips were taken with members of the family. (Table 6-6)

⁴ Apparently respondents preferred to play either in Metro Edmonton (on day trips) or in one of the places visited during their Vacation.

TABLE 6-6 Companions of Respondent on "Repeated" Trips

	Frequency	Percentage
Mostly family members	65	80.3
Mostly friends	15	18.5
No companions	1	1.2
Number of respondents reporting	81	100.0

Source: I.B.M. card data for question four (b) Part D of 102 questionnaires.

TABLE 6-7 Season of "Repeated" Day Trip Indicated As a Percentage of All Repeated Day Trips

Season (Months)	Frequency	Percentage
Winter (Dec.-Feb.)	9	4.3
Spring (Mar.-May)	20	9.6
Summer (June-Aug.)	147	70.3
June -- 43		
July -- 58		
Aug. -- 46		
Fall (Sept.-Nov.)	33	15.8
Sept. -- 19		
Oct.-Nov. 14		
Number of months specified	209 ^a	100.0
Number of respondents reporting trips all year round	10 ^b	-
Number of respondents answering	81	-

Source: I.B.M. card data for question four (c) Part D of 102 questionnaires.

^aSome respondents specified more than one month.

^bThese excluded from the above percentage calculation.

The seasonable distribution of Day trips was similar to those of Weekend and Vacation trips. The winter trips recorded in Table 6-7 were all to curling rinks.

Summary

The destinations of respondents on Day trips were characterized in terms of a radial pattern scattered tangentially to the City along the major highways. Trips ranged from one to fifty miles, one way, the median case being fifteen miles from Edmonton. In terms of the area, Day trips were defined as a metropolitan recreational hinterland which lay at a maximum distance of one hundred miles or two hours' drive from the respondent's home.

CHAPTER VII

COMPARISON OF DAY, WEEKEND AND VACATION TRAVEL

In this chapter, the relative importance of Day, Weekend and Vacation travel was assessed in terms of three travel characteristics. The first was the number of trips recorded by the respondents on Day, Weekend, and Vacation travel. (Table 7-1) The second was the estimated number of days spent by respondents on these trips. (Table 7-2) The third was the estimated number of miles traveled by respondents. (Table 7-3) All comparisons were made on an annual basis.

Using these calculations as a basis, three travel characteristics of the respondents were derived in terms of the averages. (Tables 7-4 to 7-6)

Finally, in order to assess the relative demand for recreational areas created by the respondents' trips, the destinations on Day, Weekend and Vacation trips were compared on the basis on their distance from Edmonton. (Table 7-7)

It should be noted that the trip frequencies in the Tables of this chapter were compiled on a more extensive basis than those of the previous three chapters. In those chapters, detailed analysis of the respondents' trips was

usually restricted to the first three trips recorded in question one of one hundred and two questionnaires because this was the information which was coded and punched on I.B.M. cards.

However, in the present chapter, an attempt was made to enumerate all the trips recorded in all the returned questionnaires. Consequently, trip frequencies were enumerated for all the trips recorded in both questions one and four

(d) from all the one hundred and seven questionnaires. As seen in Table 1-2, a grand total of 1,935 trips was indicated by the respondents. On an annual basis, the total number of trips was estimated to be 1,432.

On the basis of the percentages shown in Tables 4-1 and 5-1, pp. 54, and 82, the number of two to three day trips, four to six day trips, seven to thirteen day trips and so on, were estimated from the frequencies of Weekend and Vacation trips shown in Table 7-1. For example in Table 5-1 seventy-six per cent of the Weekend trips were two to three day trips. Seventy-six per cent of the 351 trips recorded in Table 7-1 was 266.

The respondents recorded a total of over one thousand Day trips, three hundred and fifty Weekend trips, and about seventy-five Vacation trips. (Table 7-1) Hence, approximately

TABLE 7-1 Summary of Trips by the Number of Trips Per Year

Duration of Trip	Frequency	Percentage
Day trips	1,005 ^a	70.2
Weekend trips	351	24.5
2 to 3 days -- 266 ^b		
4 to 6 days -- 85		
Vacation trips	76	5.3
7 to 13 days -- 41		
14 to 20 days -- 24		
21 to 29 days -- 6		
30 to 60 days -- 4		
More than 60 days -- 1		
Total	1,432	100.0

Source: ^aFrequencies based on Table 1-2. All trips recorded in questions one and four (d) of 107 questionnaires.

^bFrequencies based on percentages shown in Tables 4-1 and 5-1, pp. 54, and 82, multiplied by the Weekend and Vacation frequencies of 351 and 76 shown in the Table above. See text for further explanation.

seventy per cent of all the trips recorded were Day trips. Of the remaining thirty per cent, approximately one-quarter were Weekend trips and one-twentieth Vacation trips. Day trips were clearly dominant. Weekend trips ranked second.

A similar dominance of day trips and a similar ranking among day, weekend and vacation trips was found in an O.R.R.R.C. study. The American study recorded two hundred and eighty-six million day outings, thirty-five million weekend trips and

twenty-nine million vacation trips.¹ This represented eighty-two, ten, and eight per cent of the total number of trips, for day, weekend and vacation travel respectively. Even when allowance was made for the difference in the definition of a vacation trip between the present study and the O.R.R.R.C. report, the dominance of day trips and of the ranking of day, weekend and vacation trips was still maintained.²

In Table 7-2 Day, Weekend, and Vacation trips were compared on the basis of the number of trip-days spent in each category. Trip-day estimates were obtained by multiplying the number of trips recorded by the average duration of the trips. As a result, Day trips accounted for thirty per cent of the total time spent on recreation travel. Weekend and Vacation travel each accounted for thirty-five per cent.

Table 7-3 gives a synopsis of the estimates of the total mileage traveled by the respondents on Day, Weekend and Vacation trips. Almost one-half of the total mileage can be accounted for by Vacation trips. Weekend and Day trips accounted for thirty-five and nineteen per cent respectively.

¹O.R.R.R.C. Study Report No. 21, p. 19.

²The O.R.R.R.C. study defined a vacation trip as a trip of more than three days duration. O.R.R.R.C. Study Report No. 20, p. 39.

TABLE 7-2 Summary of Trips by the Number of Trip-Days Per Year

Type of Trip	Total Number of trip-days	Percentage
Day trips	1,005	29.7
Weekend trips	1,190	35.4
2 to 3 days -- 765 ^a		
4 to 6 days -- 425 ^b		
Vacation trips	1,172	34.9
7 to 13 days -- 410 ^c		
14 to 20 days -- 408 ^d		
21 to 29 days -- 135 ^e		
30 to 60 days -- 139 ^f		
More than 60 days -- 80 ^g		
Total	3,367	100.0

Source: All trips recorded in questions one and four (d) of 107 questionnaires. Estimates for the number of trip-days were based on the frequencies shown in Table 7-1, p. 105, multiplied by the expected or observed averages of trip duration in each subcategory as indicated in the footnotes below.

^aTwo hundred and sixty-six trips at an expected average of 2.5 days.

^bEighty-five trips at an expected average of 5.0 days.

^cForty-one trips at an expected average of 10.0 days.

^dTwenty-four trips at an expected average of 17.0 days.

^eSix trips at an observed average of 22.5 days.

^fFour trips at an observed average of 34.8 days.

^gOne trip at an observed average of 80.0 days.

TABLE 7-3 Summary of Trips by the Mileage Traveled Per Year

Duration of Trip	Total Mileage (One way)	Percentage
Day trips	32,180 ^a	19.2
Weekend trips	58,177	34.8
Vacation trips	76,944	46.0
Total	167,301	100.0

Source: All trips recorded in questions one and four (d) of 107 questionnaires.

^aFigures obtained by multiplying the number of trips per year by the one way mileage to destinations. (See Table 1-2, p. 30)

When allowance is made for the difference between the definition of a vacation trip in the present study and the O.R.R.R.C. study, it can be stated that similar percentages for the total mileage on day, weekend and vacation trips exist.³

In order to evaluate the number of trips, the time spent, and the total mileage of the respondents, it is necessary to make two assumptions. First, the relative importance of the three types of travel can be judged on the basis of the amount of time and money spent. Second, the greater the mileage, the greater the expenditure. When these assumptions

³O.R.R.R.C. Study Report, No. 21, p. 19.

are made, it becomes apparent that the most important type of travel for the respondents was Vacation travel. It not only ranked first in terms of the total mileage traveled, but it also equalled Weekend trips in the length of time spent. Second in rank were Weekend trips. Day trips came last.

TABLE 7-4 Average Number of Trips Per Respondent Per Year

Duration of Trip	Average Number of Trips
Day trips	9.4 ^a
Weekend trips	3.3 ^b
Vacation trips	0.7 ^c
Total	13.4

Source: All trips recorded in questions one and four (d) of 107 questionnaires. See Table 7-1, p. 105.

^a1005 % 107. This average includes fourteen respondents who recorded no Day trips in the previous year.

^b351 % 107. This average includes nineteen respondents who recorded no Weekend trips in the previous two years.

^c76 % 107. This average includes twenty-two respondents who recorded no Vacation trips in the previous three years.

Table 7-4 indicates that respondents went on an average of about nine Day trips and three Weekend trips each year. In contrast to this respondents recorded going on a Vacation trip only about twice every three years.

The figures in the present study were higher than those

of the O.R.R.R.C. study. The latter reported that each person twelve years of age or over went on six day trips, 0.94 weekend trips, and 0.60 vacation trips each year.⁴ Part of the reason for this difference can be attributed to the higher proportion of respondents engaged in professional, business, managerial, and clerical occupations in the present study. Another factor is the difference between the method of calculation in the two studies.

TABLE 7-5. Average Number of Trip-Days on Trips Per Respondent Per Year

Type of Trip	Average Number of Trip-Days
Day trips	9.4 ^a
Weekend trips	11.1 ^b
Vacation trips	11.0 ^c
Total	31.5

Source: All trips recorded in questions one and four (d) of 107 questionnaires. See Table 7-2, p. 107.

^a1005 % 107

^b1189 % 107

^c1172 % 107

⁴O.R.R.R.C. Study Report No. 21, p. 18.

In terms of trip-days, Table 7-5 shows that respondents spent an average of nine days on Day trips, and eleven days each on Weekend and Vacation travel.

TABLE 7-6 Average Total Mileage on Trips Per Respondent Per Year

Duration of Trip	Average Mileage Per Year ^a
Day trips	300.7 ^b
Weekend trips	543.7 ^c
Vacation trips	719.1 ^d
Total	1,563.5

Source: All trips recorded in questions one and four (d) of 107 questionnaires.

^aOne way mileage as recorded in Table 7-3, p. 108.

^b32,180 % 107.

^c58,177 % 107.

^d76,944 % 107.

On the average respondents traveled about fifteen hundred miles, one way, per year on recreation trips. (Table 7-6) Of this three hundred miles were spent on Day trips, five hundred miles on Weekend trips, and about seven hundred miles on Vacation trips.

Barbara Saunders, an A.M.A. travel consultant in Edmonton, estimated that the average Edmontonian drives between eight and ten thousand miles per year by car. She also

estimated that about one quarter of this total was spent in recreation travel.⁵ Twenty-five per cent of nine thousand miles represents 2,250 miles.

Applying this figure to 3,127, the total round trip mileage of the average respondent, suggests that seventy-two per cent of the respondents' recreation travel was by car. (Table 7-6) The remaining twenty-eight per cent would be accounted for by other means of transportation such as plane, train, bus, and boat.

It should be recalled that respondents recorded that eighty-eight per cent of their vacation trips were by car. It has also been pointed out that an O.R.R.R.C. study found that more than eighty per cent of the families recorded travel by car. If these percentages had been calculated in terms of the mileage traveled rather than in terms of the number of trips or the number of families, it is likely that they would not greatly differ from the seventy-two per cent mileage figure. Thus it was concluded that the estimated total one way mileage per year obtained in the present study was in close agreement with Miss Saunder's appraisal.

⁵Pers. comm. Miss B. Saunders, Alberta Motor Association, Edmonton.

TABLE 7-7 Summary of Trips Per Year by Mileage from Edmonton
to Trip Destinations

Mileage to Destination	Day Trips Freq.	Day Trips %	Weekend Trips Freq.	Weekend Trips %	Vacation Trips Freq.	Vacation Trips %	Total Trips Freq.	Total Trips %
1-150	988	98.7	194	55.3	4	5.2	1,186	82.8
151-374	17	1.3	147	41.9	18	23.7	182	12.7
375-1,000	-	-	10	2.8	36	47.4	46	3.2
More than 1,000	-	-	-	-	18	23.7	18	1.3
Total	1,005	100.0	351	100.0	76	100.0	1,432	100.0

Source: All trips recorded in questions one and four (d) of 107 questionnaires. See Table 1-2, p. 30.

From Table 7-7 it can be seen that about ninety-nine per cent of the Day trips were within one hundred and fifty miles of Edmonton. Destinations of a similar percentage of Weekend trips were spread over a much greater area; they varied from points one mile to about three hundred and seventy-five miles from Edmonton. Again, an equal percentage of Vacation trips were to destinations over a still greater area.

If it is assumed that the number of days spent on recreation travel is a better index of the demand for recreational areas than the number of trips, then it may be concluded that the demand created by the respondents on Day, Weekend and Vacation travel was about equal.

However, as previously noted, the respondents' Day travel was confined to an area within one hundred and fifty miles of Edmonton, whereas their Weekend and Vacation trips ranged over a much greater area. As a result the Day trip area was subjected to a relatively heavier concentration of travel. The pressure on outdoor recreation facilities were therefore greater. The extent of the demand for what has been previously defined as a regional recreational complex can be appreciated further by referring again to Table 7-7. Not only were almost all the Day trips restricted to this

region, but more than half of the Weekend trips were similarly confined.

When the relatively meagre natural recreation resources of this area are recalled, the problem faced by City and Provincial park authorities can be better understood. Attempting to provide adequate outdoor recreation areas to meet the demand is, to say the least, difficult. As the Edmonton population increases, this problem will become more acute.

CHAPTER VIII

SUMMARY AND CONCLUSIONS

In this study an attempt has been made to describe the geographic patterns of recreation travel of a sample of Edmonton people in terms of their trip destinations. This was undertaken in order to indicate the major areas of recreational demand, as generated by residence of a specific metropolitan centre on Vacation, Weekend, and Day trips. A description of the various characteristics of recreation travel related to trip destinations was also included.

A questionnaire was prepared and mailed to a random sample of Edmonton people. In order to evaluate the patterns and characteristics shown in the study it was necessary to judge the socio-economic characteristics of the respondents in terms of those factors which had the greatest influence on recreation travel. A comparison between the sample and the population of Edmonton as a whole revealed that although one could not assess the reliability of the findings within the desired confidence limits of plus or minus five per cent, it was likely that the major patterns and characteristics recorded by the respondents would reflect a similar trend for the population as a whole.

The direction of recreation travel on Vacation, Weekend, and Day trips closely reflected predictions made on the basis of the relative distance to various recreation areas from Edmonton and the attraction of these areas in terms of their characteristics and opportunities.

On Vacation trips, respondents traveled out of the province of Alberta to the mountains and the coast of British Columbia and to the west coast of the United States. Due to the curtailment of time, destinations on Weekend trips were principally focussed within the province of Alberta on the Rocky Mountain national parks and on the cottage and fishing lakes within one hundred and fifty miles of Edmonton. Three quarters of the destinations recorded on Day trips were within fifty miles of Edmonton.

For Vacation trips, sightseeing and visiting friends or relatives were the most frequently expressed interests. However, such activities as swimming, fishing, camping and golf were also important. During summer, family trips by car were the most commonly repeated type of trip. Often these were touring trips.

Although Day and Weekend trips were very similar to Vacation trips in terms of the mode of transportation, travel companions, and the season of travel as well as the

interests or activities recorded by respondents, it was found that they differed significantly from Vacation trips in terms of the patterns of travel.

Vacation trips were characterized by a linear circuit which lay principally to the south and west of Edmonton. In contrast, Day trip recreational areas could be described in terms of a recreational hinterland lying within one hundred miles of Edmonton and as being scattered along the major highways which radiate from the City. Destinations on Weekend trips showed both characteristics associated with Day trips and Vacation trips. Some of the Weekend trips fell into a linear circuit which encompassed Jasper, Banff and Calgary. Others fell into an area which was described as a regional recreation complex which lay within one hundred and fifty miles from Edmonton.

In a comparative analysis of Vacation, Weekend, and Day trips on the basis of the time spent, it was concluded that the greatest area of recreational demand was the one lying within one hundred and fifty miles of Edmonton. It was noted that this area possessed relatively meagre natural recreation resources.

The suggestions of the respondents for the location of and facilities for new provincial parks in Alberta reflected

the existing pattern of travel and interests recorded for Day and Weekend trips. The opinions of the respondents further corroborated this researcher's conclusion that a great demand for outdoor recreation areas within a maximum distance of one to three hours' drive from the respondent's home existed.

Further Research

Further research should be undertaken in order to:

- (1) establish on a statistically significant basis, the pattern of recreation travel of Edmontonians.
- (2) quantify more precisely the number and duration of the recreation trips taken by Edmontonians.

In order to obtain this information, the design of the questionnaire should require the respondent to specify all of the following for each trip: the farthest place reached, the route taken, the places stayed at along the route, the total duration of the trip, and both the round trip and the one way mileage.

In order to obtain a sample which would be representative of the Edmonton population, a stratified one should be selected. An O.R.R.R.C. study has found that "income and the availability of a paid vacation are by far the most important determinants of outdoor recreation away from home."¹ As a

¹O.R.R.R.C. Study Report No. 20, p. 54.

result the sample should include a proportionate number of both low and high income people as well as a proportionate number of those who have, and do not have a paid vacation.

If a sample of five hundred were selected and a return of eighty per cent or better were obtained, a reliability of plus or minus five per cent would be achieved providing that the four hundred respondents could still be taken to represent the Edmonton population. To confirm the last point would call for an analysis of the socio-economic characteristics of the respondents.² In view of the limitations of the direct mailed questionnaire, it is suggested that the questionnaires be completed by means of personal interviews with the respondents. So that cross tabulations of the data may be done, an effort should be made to complete every item in the questionnaire.

²H. Arkin and R.R. Colton, Tables for Statisticians, New York: 1962, p. 136.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Alberta, The Provincial Parks Act, 1964, Regulation 305/64, Queen's Printer, Edmonton, Alberta, 1965, 5 pp.
- Alberta Department of Lands and Forests, Geographical Guide, Province of Alberta 8 & 16 Mile Maps, Technical Division, Queen's Printer, Edmonton, Alberta, 1962, 40 pp.
- Alberta Government Travel Bureau, 1964 Travel Survey, Edmonton, Alberta, 1965, 24 pp.
- Alberta Government Travel Bureau, Sunny Alberta Accommodation Guide, 1965, Edmonton, Alberta, 1965, 80 pp.
- Alberta Motor Association, Tour Book, What To See, Where To Stay, Where to Dine, 7 vols., annually, American Automobile Association, Washington, D.C.
- Alberta Motor Association, Western Campground Directory of Camping Areas in Western United States and Canada, annually, American Automobile Association, Washington, D.C., 224 pp.
- Alexander, J.W. Economic Geography, Prentice-Hall Inc., Englewood Cliffs, New Jersey, 1963, 661 pp.
- Anderson, Ronald. "A Computer Program Which Computes Frequency Distributions and Histograms of One-column Variables," Program FREQ I, Institute for Sociological Research, University of Washington, Seattle, Washington, 1964, (Mimeographed), 3 pp.
- Arkin, Herbert, and Colton, Raymond, R. Tables for Statisticians, Barnes and Noble Inc., New York, 1962, 152 pp.
- Baker, W.M. "The Public Opinion Poll on Outdoor Recreation," A Report on Outdoor Recreation in Southern Saskatchewan, Department of Natural Resources, Regina, Saskatchewan, 1958, pp. 1-90.
- Bayrock, L.A., and Hughes, G.M. Surficial Geology of the Edmonton District, Alberta, Preliminary Report 62-6, Research Council of Alberta, Edmonton, Alberta, 1962, 40 pp. Maps.

- Blacklock, F.J. "1965 Fall Civic Census Enumeration," Assessor's Office, Edmonton, Alberta, January, 1966, (Mimeographed), 9 pp.
- Canada, "Background Papers," Resources for Tomorrow Conference, Volume 2, Queen's Printer, 1961, pp. 942-1046.
- Canada, D.B.S. "Population and housing characteristics by census tracts, Edmonton," Census of Canada, 1961, Bulletin CT-21, Queen's Printer, Ottawa, 1962, 15 pp.
- Canada, D.B.S. Travel Between Canada and Other Countries, annually, Catalogue No. 66-201, Queen's Printer, Ottawa, 1965, 87 pp.
- Clawson, Marion. "Land for Recreation," Land for the Future, Rand McNally and Co., Chicago, Illinois, 1963, pp. 34-46.
- Campbell, Colin K. "An Approach to Research in Recreational Geography," paper read at the Canadian Association of Geographers, B.C. Division, Vancouver, British Columbia, March 19, 1966, 11 pp. Map.
- Campbell, Robert D. "The Geography of Recreation in the United States," unpublished Ph.D. thesis, Clarke University, 1950.
- City of Edmonton Planning Department, "The Problem Assessed," Urban Renewal, A Study of the City of Edmonton 1963/64, Part 2, Edmonton, Alberta, 25 pp.
- City of Edmonton Planning Department, "Parks and Recreation," Draft General Plan for the City of Edmonton, Chapter 5, Part III, Edmonton, Alberta, 50 pp. Maps.
- Creve, Charles C. "Characteristics of Summer Week-end Recreational Travel," unpublished M.A. thesis, Yale University, 1962.
- De Grazia, Sebastian. Of Time, Work, and Leisure, Doubleday & Co. Ltd., Garden City, New York, 1964, 548 pp.
- Department of Northern Affairs and National Resources, Annual Report(s), Queen's Printer, Ottawa, 43 pp.

- Donald, J.T. and Co. Ltd. Alberta Province of Opportunity, prepared for Calgary Power Ltd., Calgary, Alberta, 1958, 321 pp.
- Dempsey, Hugh A. Historic Sites of Alberta, Alberta Government Travel Bureau, Edmonton, Alberta, 1963, 63 pp.
- Edmonton Regional Planning Commission, Metropolitan River Valleys, Edmonton, Alberta, 1964, 41 pp. Maps.
- Ferguson, G.A. Statistical Analysis in Psychology and Education, New York, 1959.
- Gibbs, Jack P. (ed.), Urban Research Methods, D. Van Nostrand Co. Ltd., Princeton, New Jersey, 1960, 625 pp.
- Gross, Edward. "A Functional Approach to Leisure Analysis," Journal of Social Problems, Vol. 9, No. 1, 1961.
- Harvie, C.H. "Recreational Land Inventory For Parks," paper read at the Federal-Provincial parks conference, Victoria, British Columbia, September 28, 1964, 5 pp.
- James, P.E. and Jones, C.F. (ed.), American Geography, Inventory and Prospect, Syracuse University Press, Syracuse, New York, 1954.
- Laycock, A.H. "Outline, Suggestions and Part of Content Report on 'The Evaluation of Lakes in the Edmonton Area for Recreational Purposes'," paper distributed to students in Geography 501, University of Alberta, Edmonton, Alberta, February, 1965, 8 pp.
- McDonald Research Limited, A Study of Travel Habits and Expenditures, Metropolitan Toronto, Prepared for the Ontario Department of Tourism and Information, 4 vols., Toronto, Ontario, 1964.
- Mead, Margaret. "The Pattern of Leisure in Contemporary American Culture," Annals of the American Academy of Political and Social Science, September, 1957, pp. 11-15.
- Meyer, A.H. and Strietelmeier, J.H. Geography in World Society, A Conceptual Approach, J.B. Lippincott Co., New York, 1963, 846 pp.

Moodie, D.W. "The St. Alberta Settlement: A Study in Historical Geography, unpublished M.A. thesis, University of Alberta, Edmonton, Alberta, 1965.

Murphy, R.E. "Geography and Outdoor Recreation: An Opportunity and an Obligation," Prof. Geogr., Vol. 15, No. 5, 1963, pp. 33-34.

Outdoor Recreation Resources Review Commission, Outdoor Recreation For America: A Report to the President and to the Congress by the Outdoor Recreation Resources Review Commission, U.S. Government Printing Office, Washington, D.C. 1962.

_____, Participation in Outdoor Recreation: Factors Affecting Demand Among American Adults, O.R.R.R.C. Study Report No. 20, U.S. Government Printing Office, Washington, D.C. 1962, 94 pp.

_____, The Future of Outdoor Recreation in Metropolitan Regions of the United States, O.R.R.R.C. Study Report No. 21, 3 vols., U.S. Government Printing Office, Washington, D.C. 1962.

Pieper, Josef. Leisure The Basis of Culture, trans. by Alexander Dru, The New American Library, Toronto, Ontario, 1963, 127 pp.

Proudfoot, J.A. "Some Aspects of the Recreational Geography of the North Saskatchewan River Valley - Edmonton," unpublished M.A. thesis, University of Alberta, Edmonton, Alberta, 1965.

Putnam, Donald F. (ed.), Canadian Regions A Geography of Canada, J.M. Dent & Sons (Canada) Ltd., Toronto, Ontario, 1963, 601 pp.

Regional Marketing Surveys Ltd., A Study of U.S. Tourists Visiting British Columbia, prepared for the B.C. Government Travel Bureau, Project No. 1168, Vancouver, British Columbia, 1962, 74 pp.

Smith, Shirley, (ed.), Edmonton Visitors' Guide, annually, Hamly Press Ltd., Edmonton, Alberta, 127 pp.

- Travers, R.M.W. Introduction to Education Research, second edition, Macmillan Co., New York, 1964, 581 pp.
- U.S. Department of Commerce, National Recreation Survey, Interviewer's Manual, Form REC 11-8, Bureau of the Census, Washington, D.C. 1960, 53 pp.
- Vogel, Robert S. "The Lake of the Ozarks Region Missouri: A Study in Recreational Geography," unpublished M.A. thesis, Michigan State University of Agric. and Applied Science, East Lansing, Michigan, 1957.
- Wolfe, R.I. "Perspective on Outdoor Recreation: A Bibliographed Survey," Geogr. Review, Vol. 54, No. 2, April 1964, pp. 203-238.
- _____, "Recreation Travel: The New Migration," Cdn. Geogr. Vol. X, I, 1966, pp. 1-14.

APPENDICES

APPENDIX I

EDMONTON TRAVEL FOR PLEASURE POLL CONFIDENTIALPART A

Name: _____

Address: _____

Age: _____ Sex: Male _____ Female _____

Marital Status: Single _____ Married _____ Widowed _____

Number of children between 0 - 4 years _____
 5 - 9 years _____
 10 - 14 " _____
 15 - 19 " _____

Occupation: _____

1. How long have you lived in Edmonton"

- (a) your lifetime _____
(b) more than 5 yrs. _____
(c) more than 3 yrs. _____
(d) more than 1 yr. _____
(e) less than 1 yr. _____

Check one only.

If you have lived in Edmonton for less than your lifetime, where
did you live before that? _____

2. Do you own a boat or a canoe? Yes _____ No _____

3. Do you own a cottage? Yes _____ No _____

If "yes", where is it? _____

4. If it is necessary to obtain additional information later this
summer or fall, would you be willing to talk to one of our re-
searchers? Yes _____ No _____

5. If additional park and recreation facilities were to be developed
in the Province of Alberta, where should they be located and
what facilities would you want?

Parks should be located: _____

Facilities should include: _____

Note: The questions on the following three pages apply respectively to three time periods: -

- pleasure trips of one week or more duration (Part B)
- pleasure trips of two to six days duration (Part C)
- pleasure trips within a single day (Part D)

The questionnaire concerns you as an individual although you may travel for pleasure with others. "Travel for pleasure" includes many things such as trips to the cottage, visiting friends or relatives in the city or on a farm, touring in Alberta and elsewhere, as well as hunting, fishing and skiing trips. An afternoon game of golf, a trip to the Game Farm or a picnic is also included. Only trips primarily for business are to be omitted.

PART B

MAJOR PLEASURE TRIPS

(ONE WEEK OR MORE
DURATION)

1. In the last three years what pleasure trips of a week or more duration have you taken?

List in the columns below:

- the places or areas you went to (If possible, name cities, towns and parks)
- the total duration of the trip in days
- the activities or interests that took you there.

(You may have gone on only one or two such trips. In this case, leave the remaining spaces blank.)

	<u>Places or Areas Visited</u>	<u>Total Duration of Trip in Days</u>	<u>Activities or Interests</u>
(a)	_____	_____	_____
(b)	_____	_____	_____
(c)	_____	_____	_____
(d)	_____	_____	_____
(e)	_____	_____	_____

2. Of these trips, which one has been the most frequently repeated in the last five years? Circle one of the following: (a) (b) (c) (d) (e)

3. For the most recent trip of the type circled in question 2, list in the columns below:

- the places or areas you stayed for one day or more
- the number of days you stayed at each place
- the reason for staying at each place (What did you do there?)

<u>Place or Area Visited</u>	<u>Number of Days</u>	<u>Reason (What did you do there?)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

4. FOR THIS SAME TRIP, fill in the answers to the following questions:

(a) How did you travel: by car, bus, train, or plane? _____

(b) With whom did you travel?

(1) mainly with the family _____

(2) mainly with friends _____

(3) alone _____

Check one only

(c) In what month'(s) do you usually take this trip? _____

(d) In the last five years how many trips of this kind have you taken? _____

(e) Do you take this kind of trip as often as you like? Yes _____

No _____

If "no" why do you not take such a trip more often?

(f) Over the past five years has there been any change in the KIND or NUMBER of trips of a week or more duration? Yes _____

No _____

(If "yes" how have they changed? and why? _____

Additional comments:

PART C

MINOR PLEASURE TRIPS

(OF 2 to 6 DAYS
DURATION)

1. In the last two years what pleasure trips of two to six days duration have you taken? (These may include weekends.) List in the columns below:
- the places or areas you went to (If possible, name cities, towns and parks)
 - the total duration of the trip in days
 - the activities or interests that took you there.
- (You may have gone on only one or two such trips. In this case leave the remaining spaces blank.)

	<u>Places or Areas Visited</u>	<u>Total Duration of Trip in Days</u>	<u>Activities or Interests</u>
(a)			
(b)			
(c)			
(d)			
(e)			

2. Of these trips, which one has been the most frequently repeated in the last five years? Circle one of the following: (a) (b) (c) (d) (e)

3. FOR THE MOST RECENT TRIP of the type circled in question 2, list
in the columns below:

- the places or areas you stayed for one day or more
- the number of days you stayed at each place
- the reason for staying at each place (What did you do there?)

[illegible]

4. FOR THIS SAME TRIP, fill in the answers to the following questions:

(a) How did you travel: by car, bus, train, or plane? _____

(b) With whom did you travel?

(1) mainly with the family _____

(2) mainly with friends _____

(3) alone _____

Check one only

(c) In what month (s) do you usually take this trip? _____

(d) In the last two years how many trips of this kind have you taken? _____

(e) Do you take this kind of trip as often as you like? Yes _____

No _____

If "no," why do you not take such a trip more often? _____

(f) Over the past five years has there been any change in the KIND or NUMBER of trips of two to six days duration? Yes _____

No _____

If "yes" how have they changed? and why? _____

Additional comments:

PART DPLEASURE TRIPS WITHIN A SINGLE DAY

1. In the last 12 months what pleasure trips within a single day have you taken? (These may include picnic outings to a lake, a game of golf on an afternoon, or a visit to a place like the Northwest Pioneer Village.) List in the columns below:
- the places or areas you went to (If possible name the towns, lakes and parks)
 - the total duration of the trip in hours
 - the activities or interests that took you there.
- (You may have gone on only one or two such trips. In this case leave the remaining spaces blank.)

	<u>Places or Areas Visited</u>	<u>Total Duration of Trip in Hours</u>	<u>Activities or Interests</u>
(a)	_____	_____	_____
(b)	_____	_____	_____
(c)	_____	_____	_____
(d)	_____	_____	_____
(e)	_____	_____	_____

2. Of these trips, which one has been most frequently repeated in the last five years? Circle one of the following: (a) (b) (c) (d) (e)
3. FOR THE MOST RECENT TRIP of the type circled in question 2, list in the columns below:
- the places or areas you stayed for one or more hours
 - the number of hours you stayed at each place
 - the reason for staying at each place (What did you do there?)

<u>Place or Area Visited</u>	<u>Number of Hours</u>	<u>Reason (What did you do there?)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

4. FOR THIS SAME TRIP, fill in the answers to the following questions:

(a) How did you travel: by car, bus, train? _____

(b) With whom did you travel?

(1) mainly with family _____

(2) mainly with friends _____

(3) alone _____

Check one only

(c) In what month (s) do you usually take this trip? _____

(d) In the last 12 months how many trips of this kind have you taken? _____

(e) Do you take this kind of trip as often as you like? Yes _____

No _____

If "no," why do you not take such a trip more often? _____

(f) Over the past five years has there been any change in the KIND or NUMBER of pleasure trips within a single day? Yes _____

No _____

If "yes," how have they changed? and Why? _____

Additional comments:

(Thank you very much for completing the questionnaire. Would you please return it at your earliest convenience using the stamped envelope provided. Please do not seal the envelope.)

APPENDIX 2

An Estimate of the Percentage of Private Telephone
Lines Per Household in Edmonton

Telephone service in Metropolitan Edmonton is provided by two companies, namely, the City of Edmonton Telephone Company and the Alberta Government Telephones. By consulting both firms it was learned that approximately ninety-seven thousand lines, private phone numbers, were listed in the Edmonton Telephone Directory in March 1966 for the municipal area of Edmonton.¹ The latest population figure for the same area on December 31, 1965 was about three hundred and seventy-one thousand.² In 1961, the Federal Census found that there were 3.7 persons to each household in Edmonton.³ Using this average, the estimated number of households for a population of three hundred and seventy-one thousand was about one hundred thousand. If allowance is made for some increase in

¹Personal Communications, City of Edmonton Telephone Company and Alberta Government Telephones. The municipal area included Jasper Place.

²Pers. comm. F.J. Blacklock, Returning Officer, City of Edmonton.

³Canada, D.B.S. "Population and housing characteristics by census tracts, Edmonton," Census of Canada, 1961, Bulletin CT-21, Ottawa, 1963, p. 8.

the number of phones from December 31, 1965 to March 1, 1966 it is possible to estimate that the number of households having telephones in this area was over ninety per cent.⁴

⁴A household according to the 1961 Census is defined as consisting of "a person or group of persons occupying one dwelling. It usually consists of a family group, with or without lodgers, employees, etc. However, it may consist of a group of unrelated persons, of two or more families sharing a dwelling, or of one person living alone." Bureau of Statistics, op. cit., p. 16.

APPENDIX 3

Statistical Method for Comparing Socio-Economic and
Travel Characteristics of Respondents

The method of testing the independence or association of socio-economic data and recreation travel in the present study was found in Statistical Analysis in Psychology and Education.¹

A frequent application of chi-square occurs where the data are comprised of paired observations on two nominal variables. We wish to know whether the variables are independent of each other or associated.... Paired observations were available for each subject.... The paired observations were entered in a bivariate frequency table. Tables of this kind are spoken of as "contingency" tables. With such tables chi-square provides an appropriate test of independence.

In applying chi-square to a contingency table to test independence, the expected cell frequencies are derived from the table. The expected cell frequencies are those we should expect to obtain if the two variables were independent of each other, given the marginal totals of the rows and columns [of the table]. Chi-square provides a measure of the discrepancy between the observed cell frequencies and those expected on the basis of independence.

If the value of chi-square is considered significant at some accepted level, usually either the five or one per cent level, we reject the null hypothesis that no difference exists between the observed and expected values. We then accept the alternative hypothesis that the two variables are associated.

¹G.A. Ferguson, Statistical Analysis in Psychology and Education, New York, 1959, pp. 165-8.

How are the expected cell frequencies calculated? ...for computational purposes the [first] expected cell frequency is obtained by multiplying together the first row and column totals and dividing by N. Similarly, the other expected cell frequencies [can be found]....

The calculation of chi-square for a contingency table is similar to that for the test of goodness of fit. The difference between each observed and expected value is squared and divided by the expected values, obtaining

$$\frac{(O-E)^2}{E} \text{ [where } O = \text{the observed values and } E = \text{the expected}$$

values]. These values are summed over all cells to obtain chi-square.... In testing the independence in any contingency table comprised of R rows and C columns, the number of degrees of freedom is given by $(R-1)(C-1)$.²

²Loc. cit.

APPENDIX 4

Classification of Alberta Provincial Parks

CLASS A - Wilderness Area

A large tract of undeveloped land with a combination of natural features of special quality for scientific or outdoor recreation activities. The purpose is to provide opportunities to expand outdoor knowledge and recreation experience in natural wild conditions. The intention would be to manage it as a primitive area with only trail access, designated camping sites and possibly lean-to shelters.

CLASS B - Historical, Ethnological, Archaeological Area

A site which has local, regional or national importance for its cultural associations; e.g., old fortifications, primitive Indian village, petroglyphs and pictographs, middens. The purpose would be to preserve portions of the country's cultural heritage for interpretation and display in an appropriate manner and for scientific research purposes.

CLASS C - Unique Natural Area (Natural Monument)

An area of outstanding scenic quality or a natural feature of special interest. For example, an attractive river canyon, scenic coastline, hot springs, a volcanic complex, a superb forest stand, noteworthy erosional or glacial features, a spectacular waterfall, an ice field, a meteor crater, etc. The purpose would be to preserve the area or feature in the natural state for viewing and interpretation in an appropriate manner.

CLASS D - Natural Environment Recreation Area

A large area with a variety of natural attractions suited to a multiplicity of outdoor recreational activities. The purpose would be to provide space for outdoor recreation activities in a predominantly natural setting; e.g., a lake and

forest complex for swimming, boating, picnicking, camping, hiking and nature study, and possibly restaurant and overnight accommodation; a mountain complex for winter sports, climbing, viewpoints and scenic drive.

CLASS E - Specialized Outdoor Recreation Area

An area with natural attractions modified to accommodate specific recreation activities usually of an intensive nature which tend to dominate the natural scene. The purpose would be to provide for popular outdoor recreation on intensively developed lands; e.g., beach park, picnic-camping park, ski development.

CLASS F - Parkways and Highway Parks

Open space bordering travel routes; e.g., both natural and artificially landscaped strip parks bordering roadways, canals and railways. The purpose would be to enhance the travel route and, in some cases, provide rest stops in pleasant surroundings.

- TYPE 1 - Area set aside for the exclusive purpose of scientific study and for outdoor recreation pursuits.
- TYPE 2 - Area set aside for the primary purpose of outdoor recreation.
- TYPE 3 - Area set aside for the purpose of multiple use of the resources, with recreation considered in the overall picture as a co-ordinate land use.

Source: Alberta Department of Lands and Forests, Parks Division, "Classification of Alberta Provincial Parks," Edmonton, 1963.

B29857